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ENVIRONMENTAL IMPACT ASSESSMENT REPORT VOLUME III APPENDICES

In respect of lands at
Flemington South LRD

Prepared on behalf of
Glenveagh Homes Ltd.

December 2025

DOCUMENT CONTROL SHEET

Client:	Glenveagh Homes Ltd.
Project Title:	Flemington South LRD
Document Title:	EIAR Volume III

Rev.	Status	Author(s)	Reviewed By	Approved By	Issue Date
DV1	Draft	IL	RK	RK	1-12-2025
F01	FINAL	RK	RK	RK	17-12-2025

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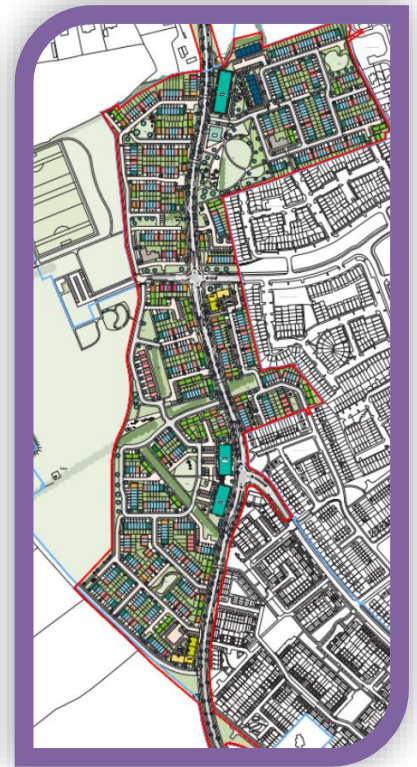
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Framework Construction Traffic Management Plan

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Framework Construction Traffic Management Plan for Proposed Large-Scale Residential Development at Flemington South LRD, Balbriggan, Co. Dublin For Glenveagh Homes Ltd.



Document Control

Contract Name	Glenveagh, Flemington South Balbriggan LRD
Contract Number	C1266
Document Type	Report
Document Status	Final
Primary Author(s)	Conor O'Brien
Other Author(s)	Cillian O'Reilly
Reviewer(s)	Jurek Gozdek, Eoin Munn

Document Review

Item No.	Item Description	Reviewer Initials	Review Date
1	Final fCTMP v1.0	EM	01.12.2024
2	Final fCTMP v1.1	EM	12.12.2024
3			
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Distribution

Item No.	Item Description	Approvers Initials	Date
1	Final fCTMP v1.0	EM	01.12.2024
2	Final fCTMP v1.1	EM	12.12.2024
3			
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6			
6			

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1. Framework Construction Traffic Management Plan

1.1 Introduction

This framework Construction Traffic Management Plan (CTMP) for the proposed development shall supplement the Outline Construction Management Plan (CMP), which is included in the pre-application document package. Within it, key construction stage traffic attributes are detailed, the overarching objective of the Plan defined, and its component measures thereafter detailed.

Disclaimer: This Framework Plan has been developed exclusively to support the planning application for the proposed development and is not intended for construction purposes.

1.2 Key Construction Stage Traffic Attributes

Key traffic related development attributes can be summarised as follows:

- construction programme: delivered over 3 phases, assuming up to 5 years to complete.
- normal construction working hours:
 - Monday to Friday 07:00hrs to 19:00hrs; and
 - Saturday 07:00hrs to 14:00hrs.
- estimated staff numbers:
 - up to ca. 40 no. staff during the site set up phase; and
 - up to ca. 150 no. staff during peak construction phase.
- estimated construction-related traffic generation:
 - ca. 60 Heavy Goods Vehicle (HGV) arrivals and ca. 60 HGV departures each day for the first 2 to 3 months for initial site set up. Decreasing to ca. 15- 18 HGV arrivals and departures on a typical day;
 - 5 Light Goods Vehicle (LGV) arrivals and 5 LGV departures otherwise in each of the weekday peak activity hours,
 - 40 car arrivals in the weekday AM peak hour, and
 - 40 car departures in the weekday PM peak hour.

1.3 CTMP Objectives

Taking into consideration the site's location and key construction phase characteristics as set out earlier in this section of the Report, the CTMP's overarching objectives are to:

- limit construction traffic impacts on nearby local roads by routing construction traffic along the regional and national road network, where possible;
- avoid conflict between construction traffic activities and general traffic/ pedestrians/ cyclists in the general vicinity of the site; and

- set out appropriate construction staff car parking arrangements so as to avoid overspill car parking on the local road network and resulting potential for traffic hazards.

1.4 Construction Traffic Management Strategy Components

Considering the above CTMP objectives, key components of its strategy are as follows:

- avoiding conflict between construction activities and traffic/ pedestrian movements;
- managing on-site deliveries; and
- staff parking arrangements and mobility management.

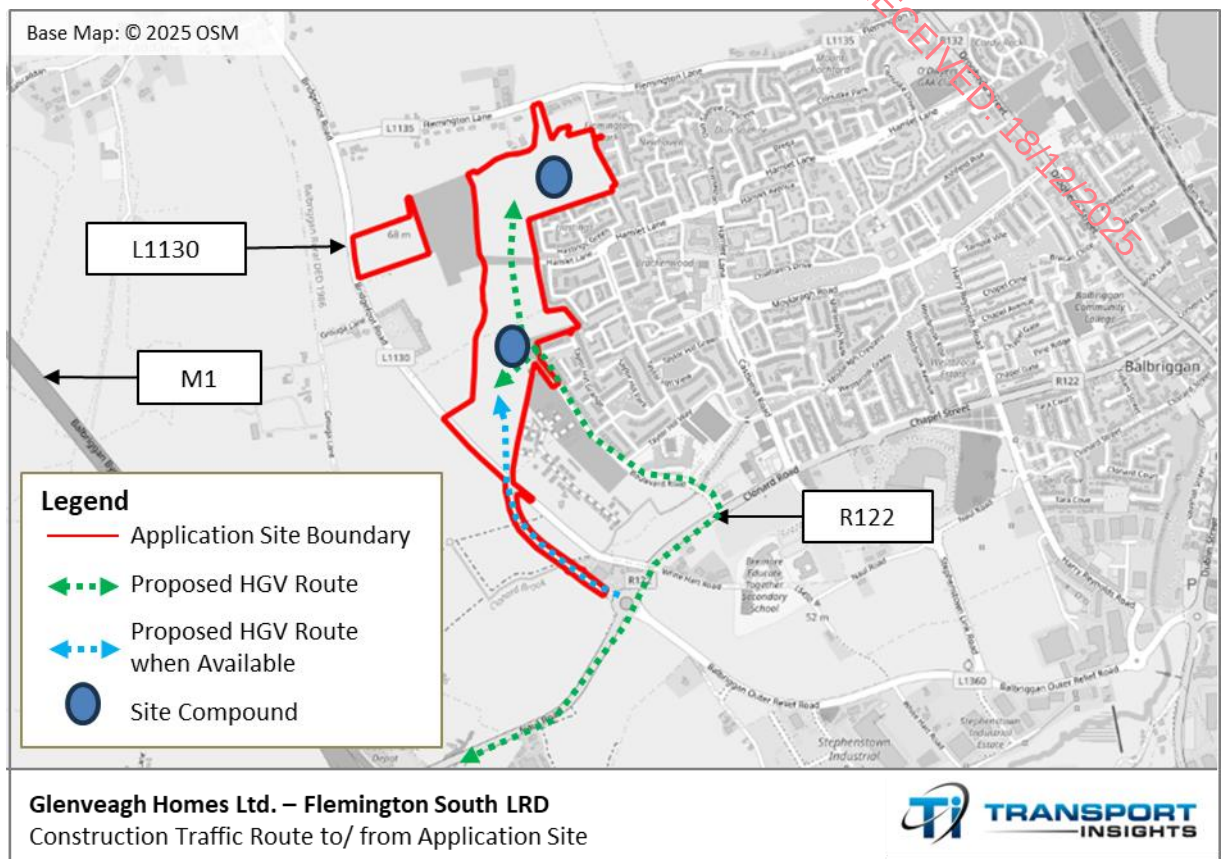
The strategy for each of the above items is expanded upon under the following subheadings.

Avoiding Conflict Between Construction Activities and Vulnerable Road Users

The site access arrangements have been developed to reflect site-specific considerations emerging from the site assessment. In addition to reflecting identified routes to/ from the site, a central consideration in determining the current access proposals is vehicular, cyclist and pedestrian safety (including construction staff).

Access to and from the development site from the surrounding road network will be via the R122, with all or most of the HGV traffic expected to travel to the site from the west, without entering Balbriggan Town (subject to contractor requirements). Construction traffic will then turn into Boulevard Road at the R122/ Boulevard Road Junction and subsequently enter the site via the south entrance. Egress from the site would be via the same route. Following implementation of the southern section of the C-Ring Road, HGV traffic shall be directed to utilise this route to access/ egress the R122.

Figure 1.1 (overleaf) outlines the construction traffic routes to and from the site.

Figure 1.1 Construction Traffic Routes to/from Application Site

A signage strategy for the identified haul route from the regional road network will be developed and implemented prior to commencement of construction works.

Managing On-Site Deliveries

Vehicular access and egress to the site will be as follows:

- Construction vehicles will access the site in forward gear, manoeuvre within it, and then exit in forward gear to accommodate loading or unloading activities.
- A banksman will be positioned at the site access to manage pedestrian, cyclist, general traffic and construction traffic and the related risk to vulnerable road users.

The exact location of deliveries shall be determined at the construction phase. Peak construction traffic is estimated to be between 50-60 no. two-way HGV trips per day and consist of various truck movements relating to activities such as excavation, steel and concrete delivery etc. Regular HGV movements to and from the site are planned to only occur during the excavation and concrete pouring stages, with most of the fitout stage deliveries to be accommodated by LGVs. In order to minimise disruption to the local road network, on days where large concrete pours are ongoing, other works will be limited to cap overall traffic generation. Furthermore, during all construction phases, loading and unloading of vehicles will occur within the site compound, i.e. no such activities will take place from the adjoining public road.

Construction Staff Parking and Mobility Management

Construction Staff Parking

All construction staff parking will be accommodated in temporary parking areas within the site, which will have capacity for ca. 100 no. vehicles. There will be a maximum of 150 no. staff on site at any one time (as outlined in Section 1.2), however as significant amounts of car sharing are expected as various disciplines will arrive together and also as some staff will arrive by public transport, walking and cycling, no more than 80 staff cars are expected to arrive on the site on a typical day. In addition to occasional visitor cars. As a result, no on-street construction parking and no overspill parking impacts on the adjoining local road network are envisaged for the duration of construction activities.

Construction Staff Mobility Management

A maximum of 150 no. construction staff will be based on-site during peak construction activity periods. In addition, daily visitor arrivals to the site, including architects, engineers and other Client representatives are anticipated throughout the construction programme.

A Construction Staff Mobility Management Plan (CSMMP) for the site will be developed by the contractor and implemented prior to construction works commencing. Key elements of the CSMMP include:

- provision of a storage compound on-site to accommodate tools and equipment, and reduce the need to travel by car or van; and
- information and promotion of available public transport services in the site's vicinity.

1.5 Outline 'Flemington Lane Development' CTMP

Following the identification of the CTMP's strategy presented in the preceding section of this Section, individual plan tasks are set out below and include:

Traffic Management Coordinator (TMC)

A site-based TMC shall be appointed upon award of the contract to oversee all activities relating to the CTMP's development and implementation. The TMC will assume responsibility for all traffic movements and will coordinate closely with and as a part of the construction teams on site.

Just-In-Time Deliveries

Scheduled in advance, where feasible, with direct live contact with suppliers to intervene as needed to optimise arrival times to the site.

Sourcing of Construction Materials

Within the constraints of performance, durability and cost, construction materials will, where feasible, be sourced from local suppliers and manufacturers, thus, minimising the impacts of construction traffic.

Construction Traffic Timing

Arising from the construction methodology, programme and working hours, an estimated maximum of 4-6 no. HGVs per hour is envisaged during the peak construction period, contributing to a very small increase in background traffic on local roads. As such, delivery timing restrictions are deemed unnecessary.

Construction Working Hours

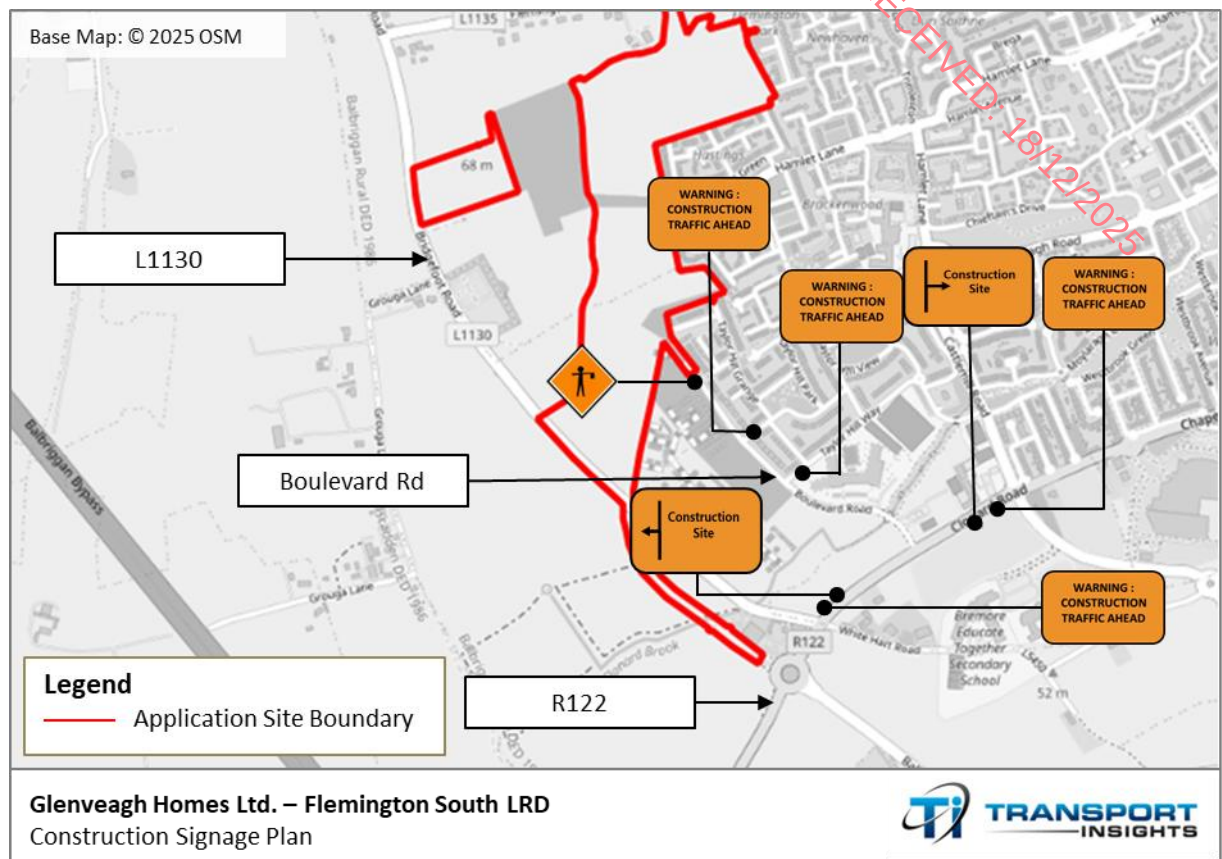
The site will operate from 07:00hrs to 19:00hrs on weekdays and from 07:00hrs to 14:00hrs on Saturday. No works will be undertaken on Sundays or Bank Holidays without the consent of FCC.

Construction Staff Mobility Management Plan (CSMMP)

A CSMMP will be developed for the site and will apply to all construction staff (including sub-contractors). The CMMP will seek to promote and inform staff in relation to non-car based means of accessing the site. To facilitate public transport use amongst construction staff, secure on-site storage facilities for equipment and tools will be provided.

Construction Signage Plan

A signage plan will be developed and implemented, providing advance warning of the construction access junction, and likelihood of slow-moving turning traffic to/ from the site. Figure 1.2 (overleaf) provides an outline of the site signage plan.

Figure 1.2 Construction Traffic Signage Plan

Sub-Contractors Obligations

Compliance with the CTMP will form part of written contracts between the principal contractor and nominated sub-contractors. The TMC will be responsible for monitoring the sub-contractor's performance in relation to all CTMP requirements, including all staff under their direct control.

Loading/ Unloading Arrangements

Methods of handling materials on site will be in accordance with construction site health and safety requirements.

Construction Vehicle Management & Cleaning

Where required, construction vehicles will be inspected prior to exit from the site to ensure that dirt is not spread onto the adjoining road, and systems shall be put in place to facilitate this process, including an on-site cleaning area and/ or rumble grid located within the site prior to the exit location.

Statutory Approvals

The principal contractor will comply at all times with FCC requirements, including but not limited to hoarding/ scaffolding licences, skip licences etc.

1.6 CTMP Monitoring and Maintenance

The CTMP will be monitored constantly throughout the proposed construction programme and updated as needed to reflect the evolving needs of the project. The process for monitoring and updating the CTMP will be in accordance with FCC requirements.

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Modelling Outputs

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Appendix F Transport Modelling Output

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J1 - R122 / C Ring Road Roundabout Modelling Report

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Junctions 9				
ARCADY 9 - Roundabout Module				
Version: 9.5.1.7462 © Copyright TRL Limited, 2019				
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk				
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution				

Filename: 18072025-Site 1 R112 L1360 Rbt_v2.j9

Path: C:\Users\Akshai\Transport Insights\TI - Projects 2025\C1266 2025 Glenveagh Flemington Lane Balbriggan LRD\Modelling and Analysis\Modelling\ARCADY\Site 1 R112 L1360 Rbt

Report generation date: 21/08/2025 11:23:43

»Base 2025, AM
 »Base 2025, PM
 »DN 2027, AM
 »DN 2027, PM
 »DN 2032, AM
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 »DM 2042, PM
 »DS 2027, AM
 »DS 2027, PM
 »DS 2032, AM
 »DS 2032, PM
 »DS 2042, AM
 »DS 2042, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Base 2025									
1 - R122(NNE)	D1	0.7	2.87	0.41	A	D2	0.3	1.95	0.20	A
2 - L1360		0.2	2.58	0.17	A		0.3	2.21	0.21	A
3 - R122(SSW)		0.7	2.74	0.39	A		0.8	2.78	0.43	A
4 - Link Road (NW)		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	DN 2027									
1 - R122(NNE)	D3	0.8	2.97	0.43	A	D4	0.3	1.98	0.21	A
2 - L1360		0.2	2.64	0.18	A		0.3	2.25	0.22	A
3 - R122(SSW)		0.7	2.82	0.41	A		0.8	2.86	0.45	A
4 - Link Road (NW)		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	DN 2032									
1 - R122(NNE)		0.9	3.19	0.46	A		0.3	2.03	0.23	A

2 - L1360	D5	0.3	2.77	0.20	A	D6	0.3	2.33	0.23	A
3 - R122(SSW)		0.8	2.99	0.44	A		0.9	3.05	0.48	A
4 - Link Road (NW)		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	DN 2042									
1 - R122(NNE)	D7	1.0	3.46	0.50	A	D8	0.3	2.08	0.24	A
2 - L1360		0.3	2.92	0.21	A		0.3	2.41	0.25	A
3 - R122(SSW)		1.0	3.19	0.47	A		1.1	3.25	0.51	A
4 - Link Road (NW)		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	DM 2027									
1 - R122(NNE)	D9	1.1	3.42	0.50	A	D10	0.3	2.07	0.25	A
2 - L1360		0.3	2.74	0.19	A		0.3	2.34	0.23	A
3 - R122(SSW)		0.8	2.92	0.43	A		1.0	3.22	0.51	A
4 - Link Road (NW)		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	DM 2032									
1 - R122(NNE)	D11	1.2	3.72	0.54	A	D12	0.4	2.12	0.27	A
2 - L1360		0.3	2.87	0.21	A		0.3	2.43	0.25	A
3 - R122(SSW)		0.9	3.11	0.46	A		1.2	3.46	0.54	A
4 - Link Road (NW)		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	DM 2042									
1 - R122(NNE)	D13	1.4	4.08	0.58	A	D14	0.4	2.18	0.28	A
2 - L1360		0.3	3.03	0.23	A		0.4	2.52	0.27	A
3 - R122(SSW)		1.0	3.32	0.49	A		1.3	3.72	0.57	A
4 - Link Road (NW)		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	DS 2027									
1 - R122(NNE)	D15	1.0	3.80	0.50	A	D16	0.3	2.25	0.25	A
2 - L1360		0.3	3.14	0.21	A		0.3	2.58	0.25	A
3 - R122(SSW)		1.0	3.26	0.49	A		1.4	3.77	0.57	A
4 - Link Road (NW)		0.3	2.92	0.25	A		0.3	2.85	0.20	A
	DS 2032									
1 - R122(NNE)	D17	1.2	4.22	0.54	A	D18	0.4	2.32	0.27	A
2 - L1360		0.3	3.33	0.23	A		0.4	2.69	0.27	A
3 - R122(SSW)		1.2	3.53	0.52	A		1.6	4.15	0.61	A
4 - Link Road (NW)		0.4	3.08	0.27	A		0.3	3.00	0.21	A
	DS 2042									
1 - R122(NNE)	D19	1.5	4.77	0.58	A	D20	0.4	2.40	0.28	A
2 - L1360		0.4	3.58	0.26	A		0.4	2.81	0.29	A
3 - R122(SSW)		1.3	3.83	0.56	A		1.8	4.59	0.65	A
4 - Link Road (NW)		0.4	3.26	0.29	A		0.3	3.19	0.23	A

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

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

File summary

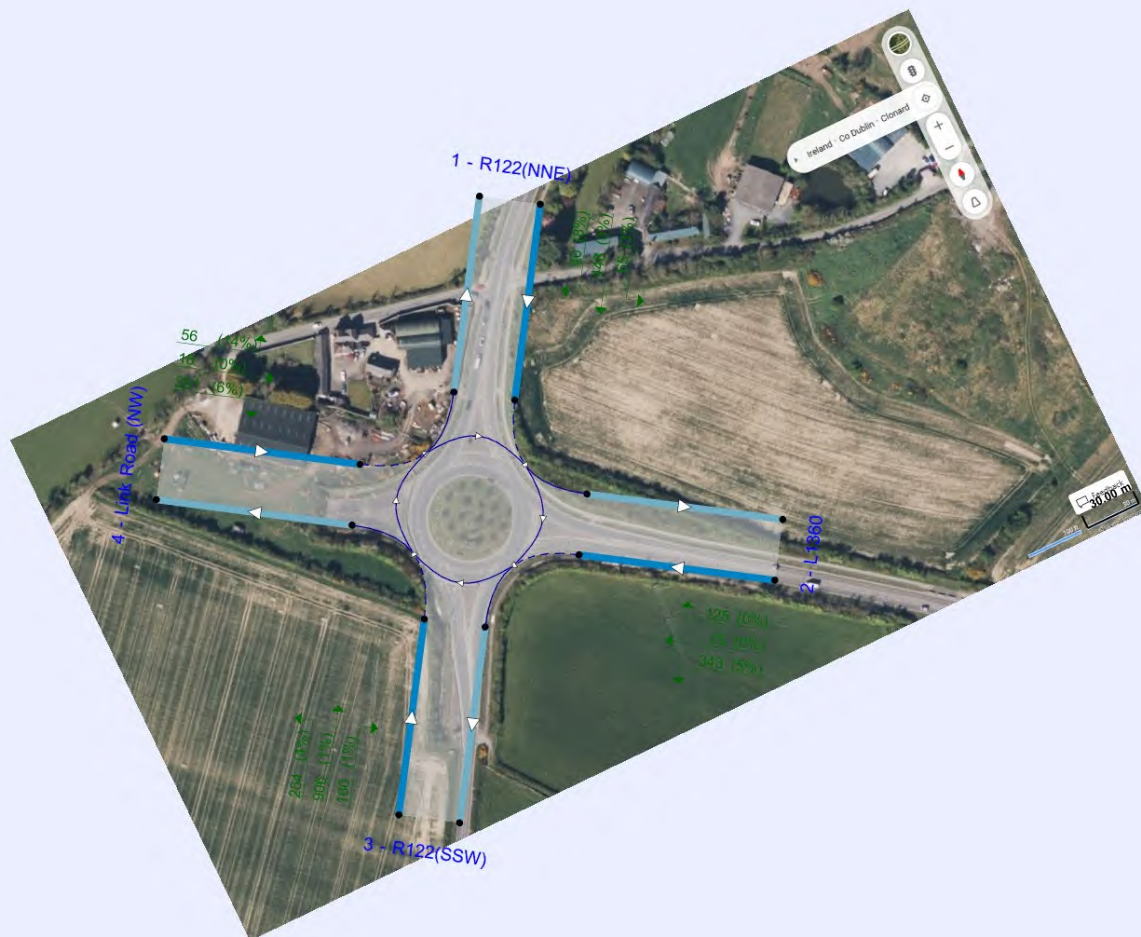
File Description

Title	C1266 2025 Glenveagh Flemington Lane Balbriggan LRD
Location	R122 Naul Road/ L1360 Roundabout
Site number	1
Date	16/07/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Akshai
Description	

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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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base 2025	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base 2025	PM	ONE HOUR	16:30	18:00	15	✓
D3	DN 2027	AM	ONE HOUR	07:45	09:15	15	✓
D4	DN 2027	PM	ONE HOUR	16:30	18:00	15	✓
D5	DN 2032	AM	ONE HOUR	07:45	09:15	15	✓
D6	DN 2032	PM	ONE HOUR	16:30	18:00	15	✓
D7	DN 2042	AM	ONE HOUR	07:45	09:15	15	✓
D8	DN 2042	PM	ONE HOUR	16:30	18:00	15	✓
D9	DM 2027	AM	ONE HOUR	07:45	09:15	15	✓
D10	DM 2027	PM	ONE HOUR	16:30	18:00	15	✓
D11	DM 2032	AM	ONE HOUR	07:45	09:15	15	✓
D12	DM 2032	PM	ONE HOUR	16:30	18:00	15	✓
D13	DM 2042	AM	ONE HOUR	07:45	09:15	15	✓
D14	DM 2042	PM	ONE HOUR	16:30	18:00	15	✓
D15	DS 2027	AM	ONE HOUR	07:45	09:15	15	✓
D16	DS 2027	PM	ONE HOUR	16:30	18:00	15	✓
D17	DS 2032	AM	ONE HOUR	07:45	09:15	15	✓
D18	DS 2032	PM	ONE HOUR	16:30	18:00	15	✓
D19	DS 2042	AM	ONE HOUR	07:45	09:15	15	✓
D20	DS 2042	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

Base 2025, AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.41	2.87	0.7	A	759	1139
2 - L1360	0.17	2.58	0.2	A	269	403
3 - R122(SSW)	0.39	2.74	0.7	A	760	1141
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	623	156	260	2306	0.270	622	447	0.0	0.4	2.240	A
2 - L1360	220	55	531	2053	0.107	220	350	0.0	0.1	2.219	A
3 - R122(SSW)	624	156	85	2336	0.267	622	666	0.0	0.4	2.237	A
4 - Link Road (NW)	0	0	708	1955	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	744	186	312	2273	0.327	744	535	0.4	0.5	2.470	A
2 - L1360	263	66	636	1987	0.132	263	419	0.1	0.2	2.359	A
3 - R122(SSW)	745	186	102	2326	0.320	744	797	0.4	0.5	2.427	A
4 - Link Road (NW)	0	0	846	1867	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	911	228	382	2228	0.409	910	655	0.5	0.7	2.866	A
2 - L1360	322	81	778	1898	0.170	322	513	0.2	0.2	2.581	A
3 - R122(SSW)	912	228	125	2312	0.395	912	976	0.5	0.7	2.739	A
4 - Link Road (NW)	0	0	1036	1746	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	911	228	382	2228	0.409	911	655	0.7	0.7	2.868	A
2 - L1360	322	81	779	1897	0.170	322	514	0.2	0.2	2.582	A
3 - R122(SSW)	912	228	125	2312	0.395	912	977	0.7	0.7	2.741	A
4 - Link Road (NW)	0	0	1037	1746	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	744	186	312	2273	0.327	745	536	0.7	0.5	2.473	A
2 - L1360	263	66	637	1987	0.132	263	420	0.2	0.2	2.360	A
3 - R122(SSW)	745	186	102	2326	0.320	746	798	0.7	0.5	2.431	A
4 - Link Road (NW)	0	0	848	1866	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	623	156	261	2305	0.270	624	448	0.5	0.4	2.246	A
2 - L1360	220	55	533	2052	0.107	221	352	0.2	0.1	2.221	A
3 - R122(SSW)	624	156	86	2336	0.267	624	668	0.5	0.4	2.242	A
4 - Link Road (NW)	0	0	710	1953	0.000	0	0	0.0	0.0	0.000	A

Base 2025, PM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.20	1.95	0.3	A	404	606
2 - L1360	0.21	2.21	0.3	A	366	549
3 - R122(SSW)	0.43	2.78	0.8	A	834	1251
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	331	83	107	2405	0.138	331	662	0.0	0.2	1.779	A
2 - L1360	300	75	292	2204	0.136	300	146	0.0	0.2	1.952	A
3 - R122(SSW)	684	171	86	2336	0.293	683	506	0.0	0.4	2.199	A
4 - Link Road (NW)	0	0	768	1916	0.000	0	0	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	396	99	128	2392	0.165	395	792	0.2	0.2	1.849	A
2 - L1360	359	90	349	2168	0.165	359	174	0.2	0.2	2.053	A
3 - R122(SSW)	817	204	102	2326	0.351	817	605	0.4	0.5	2.412	A
4 - Link Road (NW)	0	0	919	1821	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	484	121	156	2373	0.204	484	969	0.2	0.3	1.955	A
2 - L1360	439	110	427	2119	0.207	439	213	0.2	0.3	2.212	A
3 - R122(SSW)	1001	250	125	2312	0.433	1000	741	0.5	0.8	2.773	A
4 - Link Road (NW)	0	0	1125	1690	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	484	121	156	2373	0.204	484	970	0.3	0.3	1.955	A
2 - L1360	439	110	427	2119	0.207	439	214	0.3	0.3	2.212	A
3 - R122(SSW)	1001	250	126	2311	0.433	1001	741	0.8	0.8	2.776	A
4 - Link Road (NW)	0	0	1126	1690	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	396	99	128	2391	0.165	396	793	0.3	0.2	1.849	A
2 - L1360	359	90	349	2168	0.165	359	175	0.3	0.2	2.054	A
3 - R122(SSW)	817	204	103	2326	0.351	818	605	0.8	0.5	2.415	A
4 - Link Road (NW)	0	0	921	1820	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	331	83	107	2405	0.138	331	664	0.2	0.2	1.783	A
2 - L1360	300	75	292	2203	0.136	301	146	0.2	0.2	1.953	A
3 - R122(SSW)	684	171	86	2336	0.293	685	507	0.5	0.4	2.204	A
4 - Link Road (NW)	0	0	771	1915	0.000	0	0	0.0	0.0	0.000	A

DN 2027, AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.43	2.97	0.8	A	788	1182
2 - L1360	0.18	2.64	0.2	A	279	419
3 - R122(SSW)	0.41	2.82	0.7	A	789	1184
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	647	162	270	2300	0.281	645	464	0.0	0.4	2.283	A
2 - L1360	229	57	551	2040	0.112	229	364	0.0	0.1	2.251	A
3 - R122(SSW)	648	162	88	2334	0.277	646	692	0.0	0.4	2.273	A
4 - Link Road (NW)	0	0	734	1938	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	772	193	324	2265	0.341	772	555	0.4	0.5	2.531	A
2 - L1360	274	68	660	1972	0.139	274	435	0.1	0.2	2.400	A
3 - R122(SSW)	773	193	106	2324	0.333	773	828	0.4	0.5	2.477	A
4 - Link Road (NW)	0	0	879	1846	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	946	236	396	2219	0.426	945	680	0.5	0.8	2.967	A
2 - L1360	335	84	808	1879	0.178	335	533	0.2	0.2	2.640	A
3 - R122(SSW)	947	237	130	2309	0.410	946	1013	0.5	0.7	2.818	A
4 - Link Road (NW)	0	0	1076	1721	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	946	236	396	2218	0.426	946	680	0.8	0.8	2.970	A
2 - L1360	335	84	809	1879	0.178	335	533	0.2	0.2	2.641	A
3 - R122(SSW)	947	237	130	2309	0.410	947	1014	0.7	0.7	2.820	A
4 - Link Road (NW)	0	0	1077	1721	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	772	193	324	2265	0.341	773	556	0.8	0.5	2.535	A
2 - L1360	274	68	661	1972	0.139	274	436	0.2	0.2	2.402	A
3 - R122(SSW)	773	193	106	2324	0.333	774	829	0.7	0.5	2.480	A
4 - Link Road (NW)	0	0	880	1845	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	647	162	271	2299	0.281	647	466	0.5	0.4	2.289	A
2 - L1360	229	57	553	2039	0.112	229	365	0.2	0.1	2.254	A
3 - R122(SSW)	648	162	89	2334	0.277	648	694	0.5	0.4	2.280	A
4 - Link Road (NW)	0	0	737	1936	0.000	0	0	0.0	0.0	0.000	A

DN 2027, PM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.21	1.98	0.3	A	418	628
2 - L1360	0.22	2.25	0.3	A	380	570
3 - R122(SSW)	0.45	2.86	0.8	A	863	1295
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	343	86	110	2403	0.143	343	686	0.0	0.2	1.792	A
2 - L1360	312	78	302	2197	0.142	311	150	0.0	0.2	1.972	A
3 - R122(SSW)	708	177	89	2334	0.304	707	524	0.0	0.4	2.234	A
4 - Link Road (NW)	0	0	795	1899	0.000	0	0	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	410	102	131	2389	0.172	410	820	0.2	0.2	1.865	A
2 - L1360	372	93	361	2160	0.172	372	180	0.2	0.2	2.079	A
3 - R122(SSW)	846	211	106	2324	0.364	845	627	0.4	0.6	2.462	A
4 - Link Road (NW)	0	0	951	1800	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	502	126	161	2370	0.212	502	1004	0.2	0.3	1.976	A
2 - L1360	456	114	442	2109	0.216	456	220	0.2	0.3	2.249	A
3 - R122(SSW)	1036	259	130	2309	0.449	1035	768	0.6	0.8	2.856	A
4 - Link Road (NW)	0	0	1165	1665	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	502	126	161	2370	0.212	502	1005	0.3	0.3	1.976	A
2 - L1360	456	114	443	2109	0.216	456	220	0.3	0.3	2.249	A
3 - R122(SSW)	1036	259	130	2309	0.449	1036	769	0.8	0.8	2.859	A
4 - Link Road (NW)	0	0	1166	1664	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	410	102	131	2389	0.172	410	822	0.3	0.2	1.868	A
2 - L1360	372	93	362	2160	0.172	372	180	0.3	0.2	2.082	A
3 - R122(SSW)	846	211	106	2323	0.364	847	628	0.8	0.6	2.467	A
4 - Link Road (NW)	0	0	953	1799	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	343	86	110	2403	0.143	343	688	0.2	0.2	1.792	A
2 - L1360	312	78	303	2197	0.142	312	151	0.2	0.2	1.974	A
3 - R122(SSW)	708	177	89	2334	0.304	709	526	0.6	0.4	2.239	A
4 - Link Road (NW)	0	0	798	1897	0.000	0	0	0.0	0.0	0.000	A

DN 2032, AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.46	3.19	0.9	A	844	1266
2 - L1360	0.20	2.77	0.3	A	300	450
3 - R122(SSW)	0.44	2.99	0.8	A	846	1269
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	693	173	290	2287	0.303	691	497	0.0	0.5	2.374	A
2 - L1360	246	62	591	2016	0.122	246	390	0.0	0.2	2.317	A
3 - R122(SSW)	694	174	95	2331	0.298	692	742	0.0	0.5	2.352	A
4 - Link Road (NW)	0	0	787	1904	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	827	207	347	2250	0.368	826	595	0.5	0.6	2.661	A
2 - L1360	294	73	707	1943	0.151	294	466	0.2	0.2	2.487	A
3 - R122(SSW)	829	207	113	2319	0.357	828	888	0.5	0.6	2.587	A
4 - Link Road (NW)	0	0	942	1807	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1013	253	425	2200	0.460	1012	728	0.6	0.9	3.188	A
2 - L1360	360	90	866	1843	0.195	360	571	0.2	0.3	2.765	A
3 - R122(SSW)	1015	254	139	2303	0.441	1014	1087	0.6	0.8	2.990	A
4 - Link Road (NW)	0	0	1153	1673	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1013	253	425	2200	0.460	1013	729	0.9	0.9	3.194	A
2 - L1360	360	90	866	1843	0.195	360	571	0.3	0.3	2.766	A
3 - R122(SSW)	1015	254	139	2303	0.441	1015	1088	0.8	0.8	2.992	A
4 - Link Road (NW)	0	0	1154	1672	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	827	207	347	2250	0.368	828	596	0.9	0.6	2.668	A
2 - L1360	294	73	708	1942	0.151	294	467	0.3	0.2	2.491	A
3 - R122(SSW)	829	207	113	2319	0.357	830	889	0.8	0.6	2.592	A
4 - Link Road (NW)	0	0	943	1805	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	693	173	291	2286	0.303	693	499	0.6	0.5	2.380	A
2 - L1360	246	62	593	2014	0.122	246	391	0.2	0.2	2.321	A
3 - R122(SSW)	694	174	95	2330	0.298	695	744	0.6	0.5	2.359	A
4 - Link Road (NW)	0	0	790	1903	0.000	0	0	0.0	0.0	0.000	A

DN 2032, PM

RECEIVED: 18/10/2025

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.23	2.03	0.3	A	449	673
2 - L1360	0.23	2.33	0.3	A	407	610
3 - R122(SSW)	0.48	3.05	0.9	A	923	1385
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	368	92	117	2398	0.154	367	734	0.0	0.2	1.821	A
2 - L1360	334	83	324	2183	0.153	333	161	0.0	0.2	2.012	A
3 - R122(SSW)	757	189	95	2330	0.325	755	561	0.0	0.5	2.310	A
4 - Link Road (NW)	0	0	851	1864	0.000	0	0	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	440	110	140	2384	0.184	439	878	0.2	0.2	1.902	A
2 - L1360	398	100	387	2144	0.186	398	192	0.2	0.2	2.134	A
3 - R122(SSW)	904	226	114	2319	0.390	904	671	0.5	0.6	2.573	A
4 - Link Road (NW)	0	0	1018	1758	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	538	135	172	2363	0.228	538	1075	0.2	0.3	2.027	A
2 - L1360	488	122	474	2089	0.233	487	235	0.2	0.3	2.326	A
3 - R122(SSW)	1108	277	140	2303	0.481	1106	822	0.6	0.9	3.042	A
4 - Link Road (NW)	0	0	1246	1614	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	538	135	172	2363	0.228	538	1076	0.3	0.3	2.027	A
2 - L1360	488	122	475	2089	0.234	488	236	0.3	0.3	2.327	A
3 - R122(SSW)	1108	277	140	2303	0.481	1108	822	0.9	0.9	3.047	A
4 - Link Road (NW)	0	0	1247	1613	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	440	110	140	2383	0.184	440	879	0.3	0.2	1.906	A
2 - L1360	398	100	388	2143	0.186	399	193	0.3	0.2	2.137	A
3 - R122(SSW)	904	226	114	2318	0.390	906	672	0.9	0.7	2.582	A
4 - Link Road (NW)	0	0	1020	1757	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	368	92	118	2398	0.154	368	736	0.2	0.2	1.825	A
2 - L1360	334	83	325	2183	0.153	334	161	0.2	0.2	2.015	A
3 - R122(SSW)	757	189	96	2330	0.325	758	563	0.7	0.5	2.320	A
4 - Link Road (NW)	0	0	854	1862	0.000	0	0	0.0	0.0	0.000	A

DN 2042, AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.50	3.46	1.0	A	900	1350
2 - L1360	0.21	2.92	0.3	A	323	485
3 - R122(SSW)	0.47	3.19	1.0	A	904	1356
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	738	185	310	2274	0.325	736	531	0.0	0.5	2.472	A
2 - L1360	265	66	630	1991	0.133	264	416	0.0	0.2	2.395	A
3 - R122(SSW)	741	185	101	2326	0.319	739	793	0.0	0.5	2.439	A
4 - Link Road (NW)	0	0	841	1870	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	882	220	371	2235	0.394	881	635	0.5	0.7	2.810	A
2 - L1360	317	79	753	1914	0.165	316	498	0.2	0.2	2.590	A
3 - R122(SSW)	885	221	121	2314	0.383	885	948	0.5	0.7	2.709	A
4 - Link Road (NW)	0	0	1006	1766	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1080	270	454	2181	0.495	1078	778	0.7	1.0	3.446	A
2 - L1360	388	97	922	1808	0.214	387	610	0.2	0.3	2.914	A
3 - R122(SSW)	1084	271	148	2297	0.472	1083	1161	0.7	1.0	3.189	A
4 - Link Road (NW)	0	0	1232	1623	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1080	270	454	2181	0.495	1080	779	1.0	1.0	3.455	A
2 - L1360	388	97	923	1807	0.215	388	611	0.3	0.3	2.915	A
3 - R122(SSW)	1084	271	149	2297	0.472	1084	1163	1.0	1.0	3.194	A
4 - Link Road (NW)	0	0	1233	1622	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	882	220	371	2234	0.395	883	636	1.0	0.7	2.818	A
2 - L1360	317	79	755	1913	0.166	317	499	0.3	0.2	2.593	A
3 - R122(SSW)	885	221	121	2314	0.383	886	951	1.0	0.7	2.718	A
4 - Link Road (NW)	0	0	1008	1764	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	738	185	311	2273	0.325	739	533	0.7	0.5	2.481	A
2 - L1360	265	66	632	1990	0.133	265	418	0.2	0.2	2.399	A
3 - R122(SSW)	741	185	102	2326	0.319	742	796	0.7	0.5	2.447	A
4 - Link Road (NW)	0	0	844	1868	0.000	0	0	0.0	0.0	0.000	A

DN 2042, PM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.24	2.08	0.3	A	476	714
2 - L1360	0.25	2.41	0.3	A	433	650
3 - R122(SSW)	0.51	3.25	1.1	A	981	1471
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	391	98	125	2393	0.163	390	779	0.0	0.2	1.850	A
2 - L1360	355	89	344	2171	0.164	355	171	0.0	0.2	2.055	A
3 - R122(SSW)	805	201	101	2326	0.346	803	597	0.0	0.5	2.390	A
4 - Link Road (NW)	0	0	904	1830	0.000	0	0	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	467	117	150	2377	0.196	466	932	0.2	0.3	1.940	A
2 - L1360	424	106	412	2128	0.199	424	205	0.2	0.3	2.191	A
3 - R122(SSW)	961	240	121	2314	0.415	960	714	0.5	0.7	2.692	A
4 - Link Road (NW)	0	0	1082	1718	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	571	143	184	2355	0.243	571	1141	0.3	0.3	2.077	A
2 - L1360	520	130	504	2070	0.251	519	251	0.3	0.3	2.407	A
3 - R122(SSW)	1177	294	149	2297	0.512	1176	875	0.7	1.1	3.246	A
4 - Link Road (NW)	0	0	1324	1564	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	571	143	184	2355	0.243	571	1142	0.3	0.3	2.078	A
2 - L1360	520	130	504	2070	0.251	520	251	0.3	0.3	2.408	A
3 - R122(SSW)	1177	294	149	2297	0.512	1177	875	1.1	1.1	3.254	A
4 - Link Road (NW)	0	0	1326	1563	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	467	117	150	2377	0.196	467	933	0.3	0.3	1.941	A
2 - L1360	424	106	412	2128	0.199	425	205	0.3	0.3	2.192	A
3 - R122(SSW)	961	240	121	2314	0.415	962	715	1.1	0.7	2.702	A
4 - Link Road (NW)	0	0	1084	1716	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	391	98	126	2393	0.163	391	781	0.3	0.2	1.851	A
2 - L1360	355	89	345	2170	0.164	356	172	0.3	0.2	2.059	A
3 - R122(SSW)	805	201	102	2326	0.346	806	599	0.7	0.5	2.400	A
4 - Link Road (NW)	0	0	907	1828	0.000	0	0	0.0	0.0	0.000	A

DM 2027, AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.50	3.42	1.1	A	934	1400
2 - L1360	0.19	2.74	0.3	A	286	429
3 - R122(SSW)	0.43	2.92	0.8	A	828	1241
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	766	191	270	2300	0.333	764	501	0.0	0.5	2.440	A
2 - L1360	235	59	607	2006	0.117	234	427	0.0	0.1	2.295	A
3 - R122(SSW)	679	170	94	2331	0.291	677	747	0.0	0.4	2.315	A
4 - Link Road (NW)	0	0	771	1914	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	915	229	324	2265	0.404	914	599	0.5	0.7	2.775	A
2 - L1360	280	70	726	1931	0.145	280	511	0.1	0.2	2.462	A
3 - R122(SSW)	811	203	112	2320	0.350	810	894	0.4	0.6	2.539	A
4 - Link Road (NW)	0	0	922	1819	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1120	280	396	2219	0.505	1119	733	0.7	1.1	3.407	A
2 - L1360	343	86	889	1828	0.188	343	626	0.2	0.3	2.736	A
3 - R122(SSW)	993	248	137	2304	0.431	992	1094	0.6	0.8	2.920	A
4 - Link Road (NW)	0	0	1129	1688	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1120	280	396	2218	0.505	1120	734	1.1	1.1	3.415	A
2 - L1360	343	86	890	1828	0.188	343	627	0.3	0.3	2.738	A
3 - R122(SSW)	993	248	138	2304	0.431	993	1096	0.8	0.8	2.922	A
4 - Link Road (NW)	0	0	1131	1687	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	915	229	324	2265	0.404	916	600	1.1	0.7	2.785	A
2 - L1360	280	70	728	1930	0.145	280	512	0.3	0.2	2.467	A
3 - R122(SSW)	811	203	112	2320	0.350	812	896	0.8	0.6	2.542	A
4 - Link Road (NW)	0	0	924	1818	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	766	191	271	2299	0.333	767	502	0.7	0.5	2.449	A
2 - L1360	235	59	609	2004	0.117	235	429	0.2	0.2	2.299	A
3 - R122(SSW)	679	170	94	2331	0.291	680	750	0.6	0.4	2.321	A
4 - Link Road (NW)	0	0	774	1913	0.000	0	0	0.0	0.0	0.000	A

DM 2027, PM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.25	2.07	0.3	A	493	739
2 - L1360	0.23	2.34	0.3	A	396	595
3 - R122(SSW)	0.51	3.22	1.0	A	973	1459
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	404	101	110	2403	0.168	403	788	0.0	0.2	1.839	A
2 - L1360	325	81	355	2164	0.150	325	158	0.0	0.2	2.018	A
3 - R122(SSW)	798	200	102	2326	0.343	796	578	0.0	0.5	2.374	A
4 - Link Road (NW)	0	0	898	1834	0.000	0	0	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	483	121	131	2389	0.202	483	943	0.2	0.3	1.929	A
2 - L1360	388	97	425	2120	0.183	388	189	0.2	0.2	2.144	A
3 - R122(SSW)	953	238	122	2314	0.412	952	691	0.5	0.7	2.669	A
4 - Link Road (NW)	0	0	1074	1722	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	591	148	161	2370	0.249	591	1155	0.3	0.3	2.067	A
2 - L1360	476	119	520	2060	0.231	475	231	0.2	0.3	2.343	A
3 - R122(SSW)	1167	292	150	2297	0.508	1166	846	0.7	1.0	3.211	A
4 - Link Road (NW)	0	0	1315	1570	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	591	148	161	2370	0.249	591	1156	0.3	0.3	2.067	A
2 - L1360	476	119	521	2060	0.231	476	231	0.3	0.3	2.344	A
3 - R122(SSW)	1167	292	150	2297	0.508	1167	847	1.0	1.0	3.218	A
4 - Link Road (NW)	0	0	1317	1569	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	483	121	131	2389	0.202	483	945	0.3	0.3	1.931	A
2 - L1360	388	97	425	2120	0.183	389	189	0.3	0.2	2.145	A
3 - R122(SSW)	953	238	122	2313	0.412	954	692	1.0	0.7	2.679	A
4 - Link Road (NW)	0	0	1077	1721	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	404	101	110	2403	0.168	404	791	0.3	0.2	1.843	A
2 - L1360	325	81	356	2163	0.150	325	158	0.2	0.2	2.020	A
3 - R122(SSW)	798	200	102	2326	0.343	799	579	0.7	0.5	2.384	A
4 - Link Road (NW)	0	0	901	1832	0.000	0	0	0.0	0.0	0.000	A

DM 2032, AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.54	3.72	1.2	A	990	1485
2 - L1360	0.21	2.87	0.3	A	306	460
3 - R122(SSW)	0.46	3.11	0.9	A	885	1327
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	812	203	290	2287	0.355	810	534	0.0	0.6	2.544	A
2 - L1360	251	63	646	1981	0.127	251	453	0.0	0.2	2.365	A
3 - R122(SSW)	726	181	100	2327	0.312	724	797	0.0	0.5	2.394	A
4 - Link Road (NW)	0	0	824	1881	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	970	242	347	2250	0.431	969	639	0.6	0.8	2.935	A
2 - L1360	300	75	773	1901	0.158	300	543	0.2	0.2	2.555	A
3 - R122(SSW)	867	217	119	2315	0.374	866	954	0.5	0.6	2.651	A
4 - Link Road (NW)	0	0	985	1779	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1188	297	425	2200	0.540	1186	782	0.8	1.2	3.704	A
2 - L1360	368	92	947	1792	0.205	367	664	0.2	0.3	2.871	A
3 - R122(SSW)	1061	265	146	2299	0.462	1060	1168	0.6	0.9	3.101	A
4 - Link Road (NW)	0	0	1207	1639	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1188	297	425	2200	0.540	1188	783	1.2	1.2	3.717	A
2 - L1360	368	92	948	1791	0.205	368	665	0.3	0.3	2.873	A
3 - R122(SSW)	1061	265	146	2299	0.462	1061	1169	0.9	0.9	3.106	A
4 - Link Road (NW)	0	0	1208	1638	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	970	242	347	2250	0.431	972	640	1.2	0.8	2.949	A
2 - L1360	300	75	775	1900	0.158	301	544	0.3	0.2	2.558	A
3 - R122(SSW)	867	217	120	2315	0.374	868	956	0.9	0.6	2.657	A
4 - Link Road (NW)	0	0	987	1777	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	812	203	291	2286	0.355	813	536	0.8	0.6	2.554	A
2 - L1360	251	63	649	1979	0.127	252	455	0.2	0.2	2.368	A
3 - R122(SSW)	726	181	100	2327	0.312	726	800	0.6	0.5	2.402	A
4 - Link Road (NW)	0	0	827	1879	0.000	0	0	0.0	0.0	0.000	A

DM 2032, PM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.27	2.12	0.4	A	523	785
2 - L1360	0.25	2.43	0.3	A	422	633
3 - R122(SSW)	0.54	3.46	1.2	A	1032	1548
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	429	107	117	2398	0.179	428	836	0.0	0.2	1.870	A
2 - L1360	346	87	377	2150	0.161	346	168	0.0	0.2	2.061	A
3 - R122(SSW)	847	212	108	2322	0.365	845	615	0.0	0.6	2.464	A
4 - Link Road (NW)	0	0	953	1799	0.000	0	0	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	512	128	140	2384	0.215	512	1000	0.2	0.3	1.969	A
2 - L1360	414	103	451	2104	0.197	413	201	0.2	0.3	2.201	A
3 - R122(SSW)	1011	253	129	2309	0.438	1011	735	0.6	0.8	2.802	A
4 - Link Road (NW)	0	0	1140	1681	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	628	157	172	2363	0.266	627	1224	0.3	0.4	2.123	A
2 - L1360	506	127	552	2040	0.248	506	246	0.3	0.3	2.426	A
3 - R122(SSW)	1239	310	158	2291	0.541	1237	900	0.8	1.2	3.449	A
4 - Link Road (NW)	0	0	1395	1519	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	628	157	172	2363	0.266	628	1225	0.4	0.4	2.123	A
2 - L1360	506	127	553	2040	0.248	506	247	0.3	0.3	2.426	A
3 - R122(SSW)	1239	310	159	2291	0.541	1239	901	1.2	1.2	3.457	A
4 - Link Road (NW)	0	0	1397	1518	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	512	128	140	2383	0.215	513	1002	0.4	0.3	1.970	A
2 - L1360	414	103	452	2103	0.197	414	202	0.3	0.3	2.203	A
3 - R122(SSW)	1011	253	130	2309	0.438	1013	736	1.2	0.8	2.811	A
4 - Link Road (NW)	0	0	1142	1679	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	429	107	118	2398	0.179	429	839	0.3	0.2	1.874	A
2 - L1360	346	87	378	2149	0.161	347	169	0.3	0.2	2.064	A
3 - R122(SSW)	847	212	108	2322	0.365	848	616	0.8	0.6	2.472	A
4 - Link Road (NW)	0	0	956	1797	0.000	0	0	0.0	0.0	0.000	A

DM 2042, AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.58	4.08	1.4	A	1045	1568
2 - L1360	0.23	3.03	0.3	A	330	494
3 - R122(SSW)	0.49	3.32	1.0	A	942	1413
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	858	214	310	2274	0.377	855	568	0.0	0.6	2.659	A
2 - L1360	270	68	685	1957	0.138	270	480	0.0	0.2	2.445	A
3 - R122(SSW)	773	193	107	2323	0.333	771	848	0.0	0.5	2.486	A
4 - Link Road (NW)	0	0	877	1847	0.000	0	0	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1024	256	371	2235	0.458	1023	679	0.6	0.9	3.116	A
2 - L1360	323	81	820	1872	0.173	323	574	0.2	0.2	2.663	A
3 - R122(SSW)	923	231	128	2310	0.399	922	1015	0.5	0.7	2.782	A
4 - Link Road (NW)	0	0	1050	1738	0.000	0	0	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1254	314	454	2181	0.575	1252	831	0.9	1.4	4.059	A
2 - L1360	395	99	1003	1757	0.225	395	703	0.2	0.3	3.031	A
3 - R122(SSW)	1130	283	156	2293	0.493	1129	1242	0.7	1.0	3.318	A
4 - Link Road (NW)	0	0	1285	1589	0.000	0	0	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1254	314	454	2181	0.575	1254	832	1.4	1.4	4.078	A
2 - L1360	395	99	1005	1756	0.225	395	704	0.3	0.3	3.033	A
3 - R122(SSW)	1130	283	156	2292	0.493	1130	1244	1.0	1.0	3.323	A
4 - Link Road (NW)	0	0	1287	1588	0.000	0	0	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1024	256	371	2234	0.458	1026	680	1.4	0.9	3.133	A
2 - L1360	323	81	822	1870	0.173	323	576	0.3	0.2	2.669	A
3 - R122(SSW)	923	231	128	2310	0.399	924	1018	1.0	0.7	2.790	A
4 - Link Road (NW)	0	0	1052	1737	0.000	0	0	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	858	214	311	2273	0.377	859	570	0.9	0.6	2.673	A
2 - L1360	270	68	688	1955	0.138	271	482	0.2	0.2	2.452	A
3 - R122(SSW)	773	193	107	2323	0.333	774	852	0.7	0.5	2.496	A
4 - Link Road (NW)	0	0	881	1845	0.000	0	0	0.0	0.0	0.000	A

DM 2042, PM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.28	2.18	0.4	A	551	827
2 - L1360	0.27	2.52	0.4	A	449	673
3 - R122(SSW)	0.57	3.72	1.3	A	1090	1635
4 - Link Road (NW)	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	452	113	125	2393	0.189	452	881	0.0	0.2	1.902	A
2 - L1360	368	92	398	2137	0.172	367	179	0.0	0.2	2.106	A
3 - R122(SSW)	894	224	114	2318	0.386	892	651	0.0	0.6	2.547	A
4 - Link Road (NW)	0	0	1006	1766	0.000	0	0	0.0	0.0	0.000	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	540	135	150	2377	0.227	540	1054	0.2	0.3	2.010	A
2 - L1360	440	110	476	2088	0.211	439	214	0.2	0.3	2.262	A
3 - R122(SSW)	1068	267	137	2305	0.463	1067	779	0.6	0.9	2.940	A
4 - Link Road (NW)	0	0	1204	1641	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	662	165	184	2356	0.281	661	1290	0.3	0.4	2.180	A
2 - L1360	538	135	583	2021	0.266	538	262	0.3	0.4	2.515	A
3 - R122(SSW)	1308	327	167	2286	0.572	1306	954	0.9	1.3	3.710	A
4 - Link Road (NW)	0	0	1473	1470	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	662	165	184	2355	0.281	662	1291	0.4	0.4	2.180	A
2 - L1360	538	135	584	2020	0.266	538	262	0.4	0.4	2.516	A
3 - R122(SSW)	1308	327	167	2286	0.572	1308	955	1.3	1.3	3.722	A
4 - Link Road (NW)	0	0	1475	1469	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	540	135	150	2377	0.227	541	1056	0.4	0.3	2.011	A
2 - L1360	440	110	477	2087	0.211	440	214	0.4	0.3	2.263	A
3 - R122(SSW)	1068	267	137	2305	0.463	1070	780	1.3	0.9	2.954	A
4 - Link Road (NW)	0	0	1207	1639	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	452	113	126	2393	0.189	453	884	0.3	0.2	1.903	A
2 - L1360	368	92	399	2136	0.172	368	179	0.3	0.2	2.109	A
3 - R122(SSW)	894	224	115	2318	0.386	895	653	0.9	0.6	2.559	A
4 - Link Road (NW)	0	0	1010	1763	0.000	0	0	0.0	0.0	0.000	A

DS 2027, AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.50	3.80	1.0	A	820	1230
2 - L1360	0.21	3.14	0.3	A	287	431
3 - R122(SSW)	0.49	3.26	1.0	A	921	1382
4 - Link Road (NW)	0.25	2.92	0.3	A	360	540

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	673	168	528	2133	0.315	671	500	0.0	0.5	2.572	A
2 - L1360	236	59	811	1878	0.126	235	388	0.0	0.2	2.474	A
3 - R122(SSW)	756	189	121	2314	0.327	754	925	0.0	0.5	2.448	A
4 - Link Road (NW)	295	74	734	1938	0.152	294	141	0.0	0.2	2.292	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	803	201	632	2067	0.389	802	599	0.5	0.7	2.979	A
2 - L1360	282	70	970	1778	0.158	281	465	0.2	0.2	2.717	A
3 - R122(SSW)	903	226	145	2300	0.393	902	1106	0.5	0.7	2.735	A
4 - Link Road (NW)	352	88	879	1846	0.191	352	168	0.2	0.2	2.522	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	984	246	774	1975	0.498	982	733	0.7	1.0	3.790	A
2 - L1360	345	86	1187	1641	0.210	345	569	0.2	0.3	3.136	A
3 - R122(SSW)	1106	276	177	2280	0.485	1104	1354	0.7	1.0	3.252	A
4 - Link Road (NW)	432	108	1076	1722	0.251	431	206	0.2	0.3	2.921	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	984	246	775	1975	0.498	984	734	1.0	1.0	3.801	A
2 - L1360	345	86	1189	1640	0.210	345	570	0.3	0.3	3.138	A
3 - R122(SSW)	1106	276	177	2279	0.485	1106	1356	1.0	1.0	3.258	A
4 - Link Road (NW)	432	108	1077	1721	0.251	432	206	0.3	0.3	2.922	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	803	201	633	2066	0.389	805	600	1.0	0.7	2.992	A
2 - L1360	282	70	972	1776	0.159	282	466	0.3	0.2	2.723	A
3 - R122(SSW)	903	226	145	2299	0.393	904	1109	1.0	0.7	2.745	A
4 - Link Road (NW)	352	88	880	1845	0.191	353	169	0.3	0.2	2.525	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	673	168	530	2132	0.315	673	502	0.7	0.5	2.585	A
2 - L1360	236	59	814	1876	0.126	236	390	0.2	0.2	2.479	A
3 - R122(SSW)	756	189	121	2314	0.327	757	928	0.7	0.5	2.458	A
4 - Link Road (NW)	295	74	737	1936	0.152	295	141	0.2	0.2	2.297	A

DS 2027, PM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.25	2.25	0.3	A	450	676
2 - L1360	0.25	2.58	0.3	A	403	604
3 - R122(SSW)	0.57	3.77	1.4	A	1085	1627
4 - Link Road (NW)	0.20	2.85	0.3	A	272	408

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	369	92	296	2283	0.162	369	722	0.0	0.2	1.940	A
2 - L1360	331	83	501	2072	0.160	330	163	0.0	0.2	2.134	A
3 - R122(SSW)	890	222	134	2306	0.386	887	697	0.0	0.6	2.568	A
4 - Link Road (NW)	223	56	796	1899	0.118	223	225	0.0	0.1	2.275	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	441	110	354	2245	0.196	441	864	0.2	0.3	2.059	A
2 - L1360	395	99	600	2010	0.196	394	196	0.2	0.3	2.303	A
3 - R122(SSW)	1063	266	160	2290	0.464	1062	834	0.6	0.9	2.966	A
4 - Link Road (NW)	266	67	952	1800	0.148	266	270	0.1	0.2	2.486	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	540	135	434	2194	0.246	540	1058	0.3	0.3	2.246	A
2 - L1360	483	121	734	1926	0.251	483	239	0.3	0.3	2.579	A
3 - R122(SSW)	1301	325	196	2268	0.574	1299	1021	0.9	1.4	3.760	A
4 - Link Road (NW)	326	82	1165	1665	0.196	326	330	0.2	0.3	2.848	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	540	135	434	2194	0.246	540	1059	0.3	0.3	2.247	A
2 - L1360	483	121	735	1925	0.251	483	240	0.3	0.3	2.580	A
3 - R122(SSW)	1301	325	196	2268	0.574	1301	1022	1.4	1.4	3.775	A
4 - Link Road (NW)	326	82	1167	1664	0.196	326	330	0.3	0.3	2.850	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	441	110	355	2245	0.197	442	866	0.3	0.3	2.062	A
2 - L1360	395	99	601	2010	0.196	395	196	0.3	0.3	2.306	A
3 - R122(SSW)	1063	266	160	2290	0.464	1064	835	1.4	0.9	2.982	A
4 - Link Road (NW)	266	67	954	1798	0.148	267	270	0.3	0.2	2.491	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	369	92	297	2282	0.162	370	725	0.3	0.2	1.944	A
2 - L1360	331	83	503	2071	0.160	331	164	0.3	0.2	2.138	A
3 - R122(SSW)	890	222	134	2306	0.386	891	699	0.9	0.6	2.582	A
4 - Link Road (NW)	223	56	799	1897	0.118	223	226	0.2	0.1	2.280	A

DS 2032, AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.54	4.22	1.2	A	878	1317
2 - L1360	0.23	3.33	0.3	A	309	463
3 - R122(SSW)	0.52	3.53	1.2	A	985	1477
4 - Link Road (NW)	0.27	3.08	0.4	A	373	559

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	720	180	556	2116	0.341	718	537	0.0	0.5	2.698	A
2 - L1360	253	63	859	1847	0.137	253	415	0.0	0.2	2.558	A
3 - R122(SSW)	808	202	129	2309	0.350	805	983	0.0	0.6	2.561	A
4 - Link Road (NW)	306	76	787	1904	0.161	305	148	0.0	0.2	2.356	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	860	215	665	2045	0.421	859	642	0.5	0.8	3.181	A
2 - L1360	303	76	1028	1741	0.174	302	496	0.2	0.2	2.836	A
3 - R122(SSW)	965	241	155	2293	0.421	964	1176	0.6	0.8	2.898	A
4 - Link Road (NW)	365	91	942	1806	0.202	365	176	0.2	0.3	2.616	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1054	263	814	1949	0.541	1052	786	0.8	1.2	4.197	A
2 - L1360	370	93	1258	1596	0.232	370	607	0.2	0.3	3.327	A
3 - R122(SSW)	1181	295	189	2272	0.520	1180	1439	0.8	1.2	3.525	A
4 - Link Road (NW)	447	112	1153	1673	0.268	447	216	0.3	0.4	3.076	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1054	263	815	1949	0.541	1054	787	1.2	1.2	4.216	A
2 - L1360	370	93	1260	1595	0.232	370	608	0.3	0.3	3.331	A
3 - R122(SSW)	1181	295	190	2272	0.520	1181	1441	1.2	1.2	3.534	A
4 - Link Road (NW)	447	112	1155	1672	0.268	447	216	0.4	0.4	3.079	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	860	215	666	2044	0.421	862	644	1.2	0.8	3.198	A
2 - L1360	303	76	1031	1739	0.174	303	498	0.3	0.2	2.843	A
3 - R122(SSW)	965	241	155	2293	0.421	966	1179	1.2	0.8	2.910	A
4 - Link Road (NW)	365	91	944	1805	0.202	366	177	0.4	0.3	2.620	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	720	180	558	2114	0.341	721	539	0.8	0.5	2.710	A
2 - L1360	253	63	863	1845	0.137	254	416	0.2	0.2	2.564	A
3 - R122(SSW)	808	202	130	2309	0.350	809	987	0.8	0.6	2.570	A
4 - Link Road (NW)	306	76	790	1902	0.161	306	148	0.3	0.2	2.364	A

DS 2032, PM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.27	2.32	0.4	A	482	723
2 - L1360	0.27	2.69	0.4	A	430	644
3 - R122(SSW)	0.61	4.15	1.6	A	1150	1725
4 - Link Road (NW)	0.21	3.00	0.3	A	285	428

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	395	99	312	2273	0.174	394	772	0.0	0.2	1.977	A
2 - L1360	352	88	532	2053	0.172	352	174	0.0	0.2	2.187	A
3 - R122(SSW)	944	236	142	2301	0.410	941	742	0.0	0.7	2.681	A
4 - Link Road (NW)	234	58	850	1864	0.126	233	232	0.0	0.2	2.339	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	472	118	373	2234	0.211	472	924	0.2	0.3	2.109	A
2 - L1360	421	105	636	1987	0.212	421	208	0.2	0.3	2.375	A
3 - R122(SSW)	1127	282	170	2284	0.493	1126	887	0.7	1.0	3.153	A
4 - Link Road (NW)	279	70	1017	1759	0.159	279	278	0.2	0.2	2.578	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	578	145	456	2180	0.265	578	1130	0.3	0.4	2.320	A
2 - L1360	515	129	779	1897	0.272	515	255	0.3	0.4	2.692	A
3 - R122(SSW)	1380	345	208	2261	0.610	1378	1087	1.0	1.6	4.129	A
4 - Link Road (NW)	342	86	1245	1614	0.212	342	340	0.2	0.3	2.997	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	578	145	457	2179	0.265	578	1132	0.4	0.4	2.320	A
2 - L1360	515	129	780	1897	0.272	515	255	0.4	0.4	2.693	A
3 - R122(SSW)	1380	345	208	2261	0.610	1380	1087	1.6	1.6	4.151	A
4 - Link Road (NW)	342	86	1247	1613	0.212	342	341	0.3	0.3	3.000	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	472	118	374	2233	0.211	472	926	0.4	0.3	2.111	A
2 - L1360	421	105	637	1987	0.212	421	209	0.4	0.3	2.379	A
3 - R122(SSW)	1127	282	170	2284	0.493	1129	889	1.6	1.0	3.171	A
4 - Link Road (NW)	279	70	1020	1757	0.159	280	279	0.3	0.2	2.584	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	395	99	313	2272	0.174	395	775	0.3	0.2	1.980	A
2 - L1360	352	88	534	2052	0.172	353	175	0.3	0.2	2.190	A
3 - R122(SSW)	944	236	142	2301	0.410	945	744	1.0	0.7	2.697	A
4 - Link Road (NW)	234	58	854	1862	0.126	234	233	0.2	0.2	2.343	A

DS 2042, AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.58	4.77	1.5	A	936	1404
2 - L1360	0.26	3.58	0.4	A	331	497
3 - R122(SSW)	0.56	3.83	1.3	A	1048	1572
4 - Link Road (NW)	0.29	3.26	0.4	A	386	579

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	768	192	584	2098	0.366	766	573	0.0	0.6	2.858	A
2 - L1360	272	68	908	1817	0.150	271	441	0.0	0.2	2.669	A
3 - R122(SSW)	860	215	138	2304	0.373	857	1041	0.0	0.6	2.663	A
4 - Link Road (NW)	317	79	840	1870	0.169	316	155	0.0	0.2	2.428	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	917	229	698	2024	0.453	916	686	0.6	0.9	3.440	A
2 - L1360	324	81	1086	1705	0.190	324	528	0.2	0.3	2.990	A
3 - R122(SSW)	1027	257	165	2287	0.449	1026	1246	0.6	0.9	3.059	A
4 - Link Road (NW)	378	95	1006	1766	0.214	378	185	0.2	0.3	2.721	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1123	281	855	1923	0.584	1121	839	0.9	1.5	4.741	A
2 - L1360	397	99	1329	1552	0.256	397	646	0.3	0.4	3.572	A
3 - R122(SSW)	1258	314	202	2265	0.555	1256	1525	0.9	1.3	3.820	A
4 - Link Road (NW)	463	116	1231	1623	0.285	463	226	0.3	0.4	3.252	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	1123	281	856	1922	0.584	1123	840	1.5	1.5	4.773	A
2 - L1360	397	99	1332	1550	0.256	397	647	0.4	0.4	3.579	A
3 - R122(SSW)	1258	314	202	2264	0.555	1258	1527	1.3	1.3	3.832	A
4 - Link Road (NW)	463	116	1233	1622	0.286	463	227	0.4	0.4	3.258	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	917	229	700	2023	0.453	920	687	1.5	0.9	3.463	A
2 - L1360	324	81	1090	1702	0.191	325	530	0.4	0.3	2.997	A
3 - R122(SSW)	1027	257	165	2287	0.449	1029	1250	1.3	0.9	3.070	A
4 - Link Road (NW)	378	95	1008	1764	0.214	379	185	0.4	0.3	2.728	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	768	192	586	2096	0.366	769	575	0.9	0.6	2.875	A
2 - L1360	272	68	912	1814	0.150	272	443	0.3	0.2	2.679	A
3 - R122(SSW)	860	215	138	2304	0.373	861	1046	0.9	0.6	2.678	A
4 - Link Road (NW)	317	79	844	1868	0.170	317	155	0.3	0.2	2.434	A

DS 2042, PM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Link Road (NW) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(NNE)	0.28	2.40	0.4	A	513	769
2 - L1360	0.29	2.81	0.4	A	456	684
3 - R122(SSW)	0.65	4.59	1.8	A	1214	1821
4 - Link Road (NW)	0.23	3.19	0.3	A	299	448

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	421	105	327	2263	0.186	420	820	0.0	0.2	2.016	A
2 - L1360	374	94	562	2034	0.184	373	184	0.0	0.2	2.240	A
3 - R122(SSW)	996	249	150	2297	0.434	993	786	0.0	0.8	2.797	A
4 - Link Road (NW)	245	61	903	1831	0.134	244	240	0.0	0.2	2.425	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	502	126	391	2222	0.226	502	981	0.2	0.3	2.162	A
2 - L1360	447	112	673	1964	0.227	446	221	0.2	0.3	2.452	A
3 - R122(SSW)	1189	297	179	2278	0.522	1188	940	0.8	1.1	3.348	A
4 - Link Road (NW)	292	73	1080	1719	0.170	292	287	0.2	0.2	2.699	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	615	154	479	2165	0.284	615	1201	0.3	0.4	2.398	A
2 - L1360	547	137	824	1870	0.293	547	270	0.3	0.4	2.814	A
3 - R122(SSW)	1457	364	219	2254	0.646	1454	1151	1.1	1.8	4.554	A
4 - Link Road (NW)	358	90	1322	1566	0.229	358	351	0.2	0.3	3.187	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	615	154	480	2165	0.284	615	1203	0.4	0.4	2.399	A
2 - L1360	547	137	824	1869	0.293	547	270	0.4	0.4	2.815	A
3 - R122(SSW)	1457	364	219	2254	0.646	1456	1152	1.8	1.8	4.587	A
4 - Link Road (NW)	358	90	1325	1564	0.229	358	351	0.3	0.3	3.192	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	502	126	392	2221	0.226	503	985	0.4	0.3	2.166	A
2 - L1360	447	112	674	1964	0.227	447	221	0.4	0.3	2.454	A
3 - R122(SSW)	1189	297	179	2278	0.522	1192	942	1.8	1.1	3.374	A
4 - Link Road (NW)	292	73	1084	1716	0.170	293	287	0.3	0.2	2.704	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(NNE)	421	105	328	2262	0.186	421	824	0.3	0.2	2.019	A
2 - L1360	374	94	564	2033	0.184	374	185	0.3	0.2	2.246	A
3 - R122(SSW)	996	249	150	2296	0.434	997	788	1.1	0.8	2.816	A
4 - Link Road (NW)	245	61	907	1828	0.134	245	241	0.2	0.2	2.431	A

J3 - R122/ Boulevard Road Modelling Report

RECEIVED: 18/12/2025

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	C1266 2025 Glenveagh Flemington Lane Balbriggan LRD
Title:	Clonard Boulevard Rd Jn
Location:	
Additional detail:	
File name:	15072025 C1266 Site 3 Model 120s Cycle time.lsg3x
Author:	akshai
Company:	TI
Address:	
Linsig Version:	3, 3, 0, 6

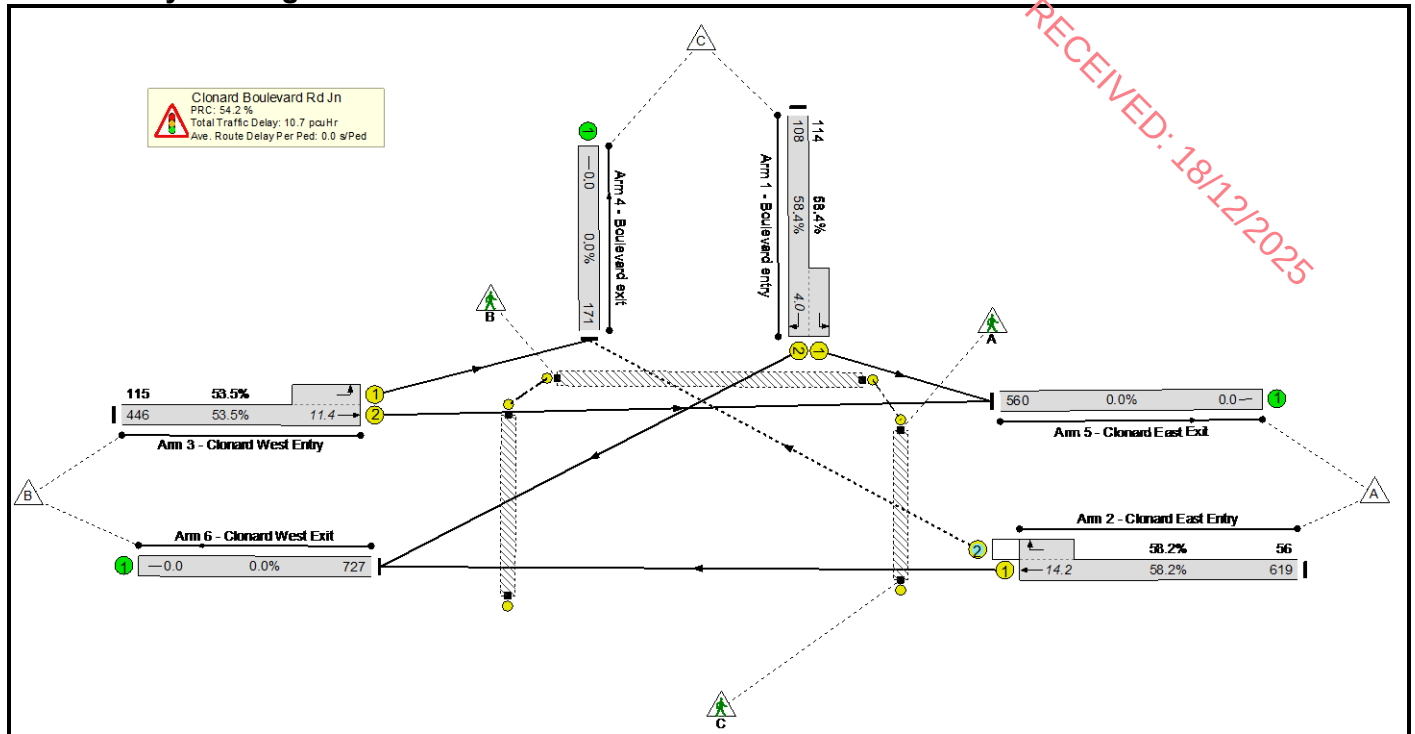
Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	DN 2027	YoO DN (2027) AM	Network Control Plan 1	08:00 - 09:00	120	54.2	10.68
2	DN 2027	YoO DN (2027) PM	Network Control Plan 1	16:45 - 17:45	120	35.3	7.78
3	DN 2032	YoO+5 DN (2032) AM	Network Control Plan 1	08:00 - 09:00	120	42.5	11.96
4	DN 2032	YoO+5 DN (2032) PM	Network Control Plan 1	16:45 - 17:45	120	26.5	8.74
5	DN 2042	YoO+15 DN (2042) AM	Network Control Plan 1	08:00 - 09:00	120	34.4	13.26
6	DN 2042	YoO+15 DN (2042) PM	Network Control Plan 1	16:45 - 17:45	120	19.1	9.80
7	DM 2027	YoO DM (2027) AM	Network Control Plan 1	08:00 - 09:00	120	6.8	24.79
8	DM 2027	YoO DM (2027) PM	Network Control Plan 1	16:45 - 17:45	120	7.4	18.47
9	DM 2032	YoO+5 DM (2032) AM	Network Control Plan 1	08:00 - 09:00	120	1.9	28.68
10	DM 2032	YoO+5 DM (2032) PM	Network Control Plan 1	16:45 - 17:45	120	1.5	21.77
11	DM 2042	YoO+15 DM (2042) AM	Network Control Plan 1	08:00 - 09:00	120	-2.4	34.08
12	DM 2042	YoO+15 DM (2042) PM	Network Control Plan 1	16:45 - 17:45	120	-2.5	26.87
13	DS 2027	YoO DS (2027) AM	Network Control Plan 1	08:00 - 09:00	120	25.7	15.80
14	DS 2027	YoO DS (2027) PM	Network Control Plan 1	16:45 - 17:45	120	35.3	11.89
15	DS 2032	YoO+5 DS (2032) AM	Network Control Plan 1	08:00 - 09:00	120	19.4	17.83
16	DS 2032	YoO+5 DS (2032) PM	Network Control Plan 1	16:45 - 17:45	120	26.5	13.37
17	DS 2042	YoO+15 DS (2042) AM	Network Control Plan 1	08:00 - 09:00	120	13.2	19.80
18	DS 2042	YoO+15 DS (2042) PM	Network Control Plan 1	16:45 - 17:45	120	19.1	15.00

Basic Results Summary

Scenario 1: 'DN 2027' (FG1: 'YoO DN (2027) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

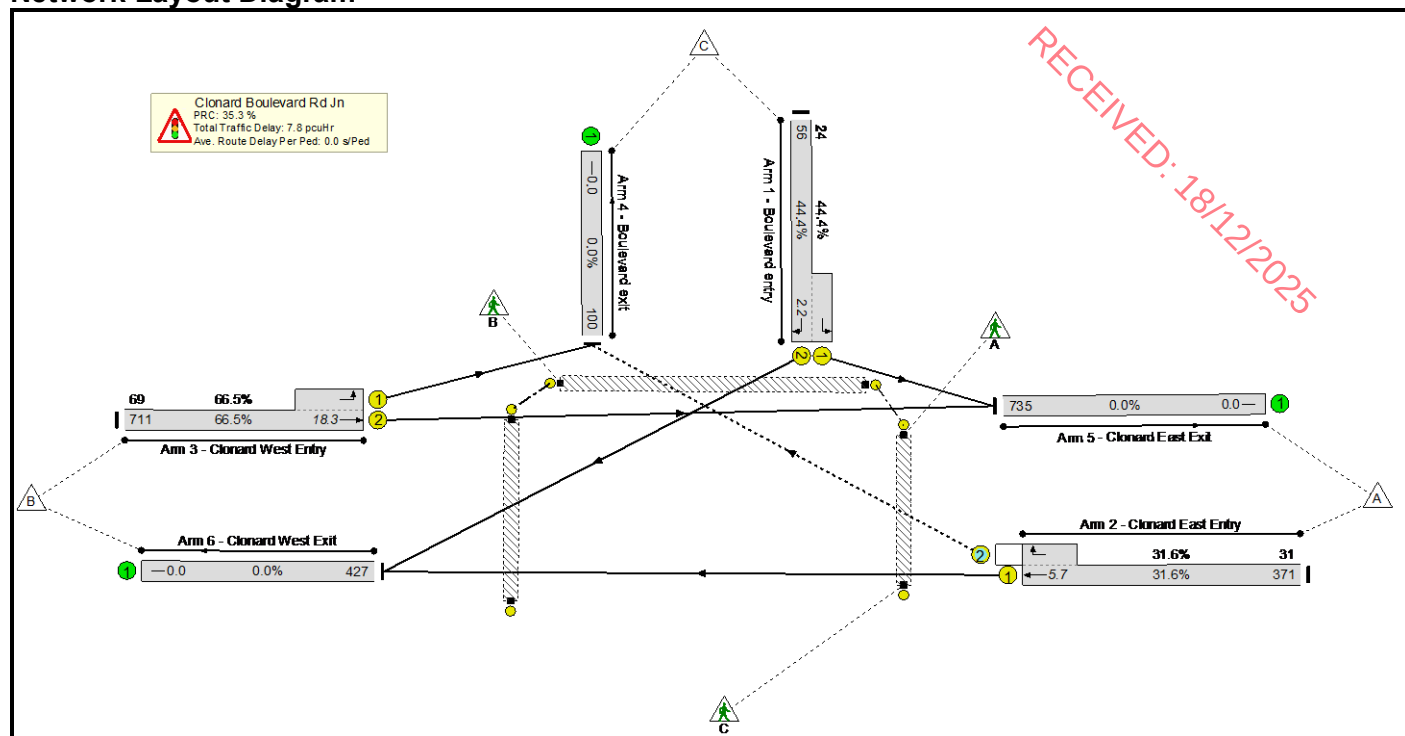
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	58.4%	52	3	1	10.7	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	58.4%	52	3	1	10.7	-	-
1/2+1/1	Boulevard entry Right	U	B	H	1	14:22	8	-	222	1891:1598	185+195	58.4 : 58.4%	-	-	-	3.5	56.7	4.0
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	69	4	-	675	1965:1914	1064+96	58.2 : 58.2%	52	3	1	3.7	19.6	14.2
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	60	-	-	561	2105:1618	833+215	53.5 : 53.5%	-	-	-	3.5	22.5	11.4
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 54.2 Total Delay for Signalled Lanes (pcuHr): 10.68 Cycle Time (s): 120 PRC Over All Lanes (%): 54.2 Total Delay Over All Lanes(pcuHr): 10.68																		

Basic Results Summary

Scenario 2: 'DN 2027' (FG2: 'YoO DN (2027) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

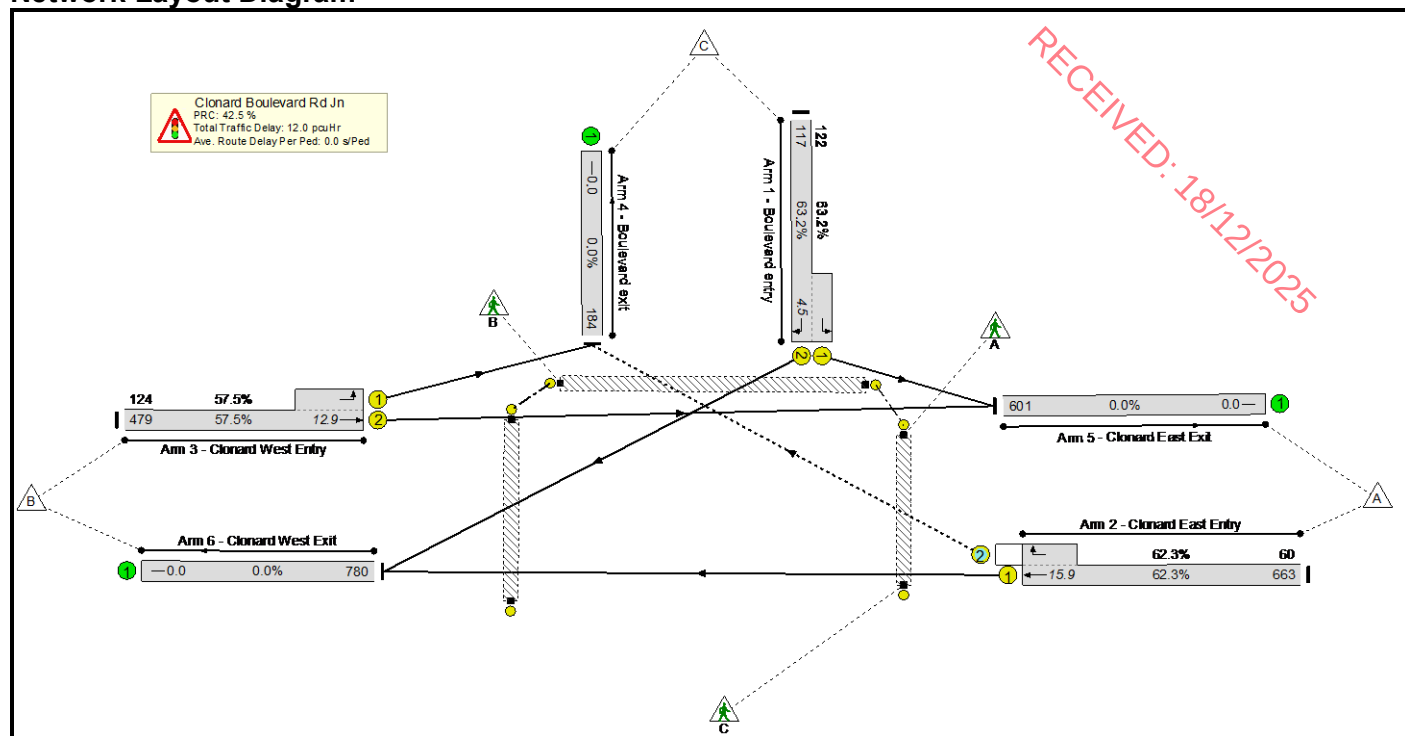
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	66.5%	29	2	1	7.8	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	66.5%	29	2	1	7.8	-	-
1/2+1/1	Boulevard entry Left Right	U	B	H	1	7:15	8	-	80	1891:1598	126+54	44.4 : 44.4%	-	-	-	1.5	69.3	2.2
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	76	4	-	402	1965:1914	1176+98	31.6 : 31.6%	29	2	1	1.4	12.6	5.7
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	67	-	-	780	2105:1618	1069+104	66.5 : 66.5%	-	-	-	4.8	22.3	18.3
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 35.3 Total Delay for Signalled Lanes (pcuHr): 7.78 Cycle Time (s): 120 PRC Over All Lanes (%): 35.3 Total Delay Over All Lanes(pcuHr): 7.78																		

Basic Results Summary

Scenario 3: 'DN 2032' (FG3: 'YoO+5 DN (2032) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

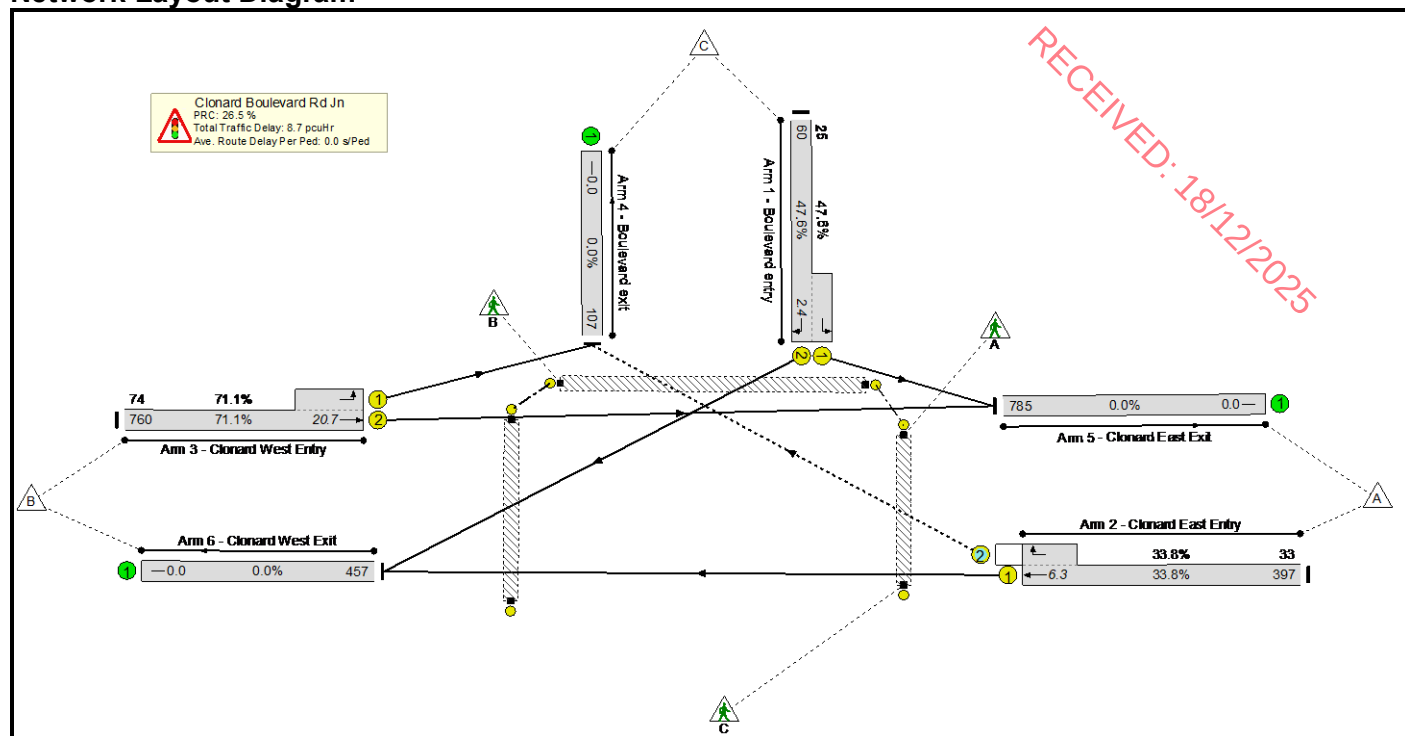
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	63.2%	56	4	1	12.0	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	63.2%	56	4	1	12.0	-	-
1/2+1/1	Boulevard entry Right	U	B	H	1	14:22	8	-	239	1891:1598	185+193	63.2 : 63.2%	-	-	-	3.9	58.4	4.5
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	69	4	-	723	1965:1914	1064+96	62.3 : 62.3%	56	4	1	4.2	20.7	15.9
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	60	-	-	603	2105:1618	832+215	57.5 : 57.5%	-	-	-	3.9	23.4	12.9
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 42.5 Total Delay for Signalled Lanes (pcuHr): 11.96 Cycle Time (s): 120 PRC Over All Lanes (%): 42.5 Total Delay Over All Lanes(pcuHr): 11.96																		

Basic Results Summary

Scenario 4: 'DN 2032' (FG4: 'YoO+5 DN (2032) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

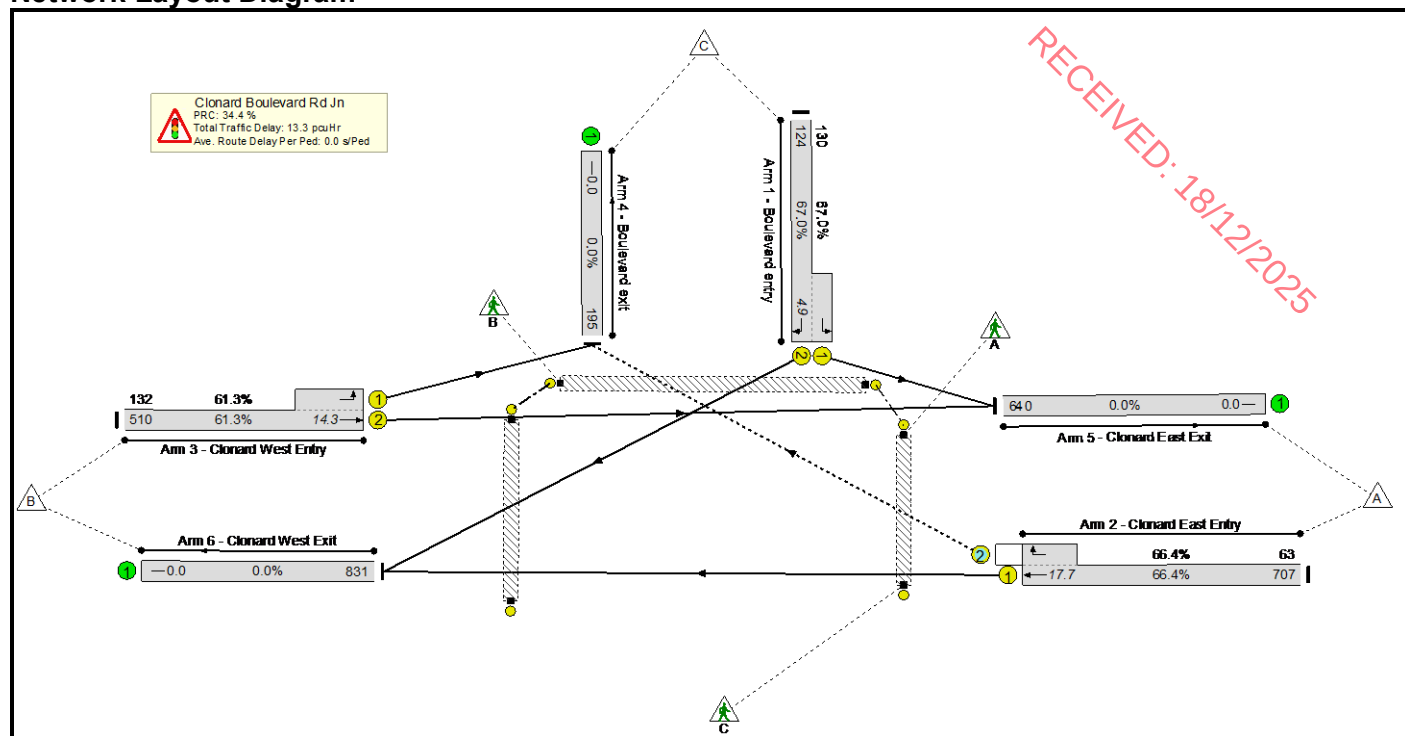
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	71.1%	31	2	1	8.7	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	71.1%	31	2	1	8.7	-	-
1/2+1/1	Boulevard entry Left Right	U	B	H	1	7:15	8	-	85	1891:1598	126+53	47.6 : 47.6%	-	-	-	1.7	70.7	2.4
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	76	4	-	430	1965:1914	1176+98	33.8 : 33.8%	31	2	1	1.6	13.0	6.3
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	67	-	-	834	2105:1618	1069+104	71.1 : 71.1%	-	-	-	5.5	23.8	20.7
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 26.5 Total Delay for Signalled Lanes (pcuHr): 8.74 Cycle Time (s): 120 PRC Over All Lanes (%): 26.5 Total Delay Over All Lanes(pcuHr): 8.74																		

Basic Results Summary

Scenario 5: 'DN 2042' (FG5: 'YoO+15 DN (2042) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

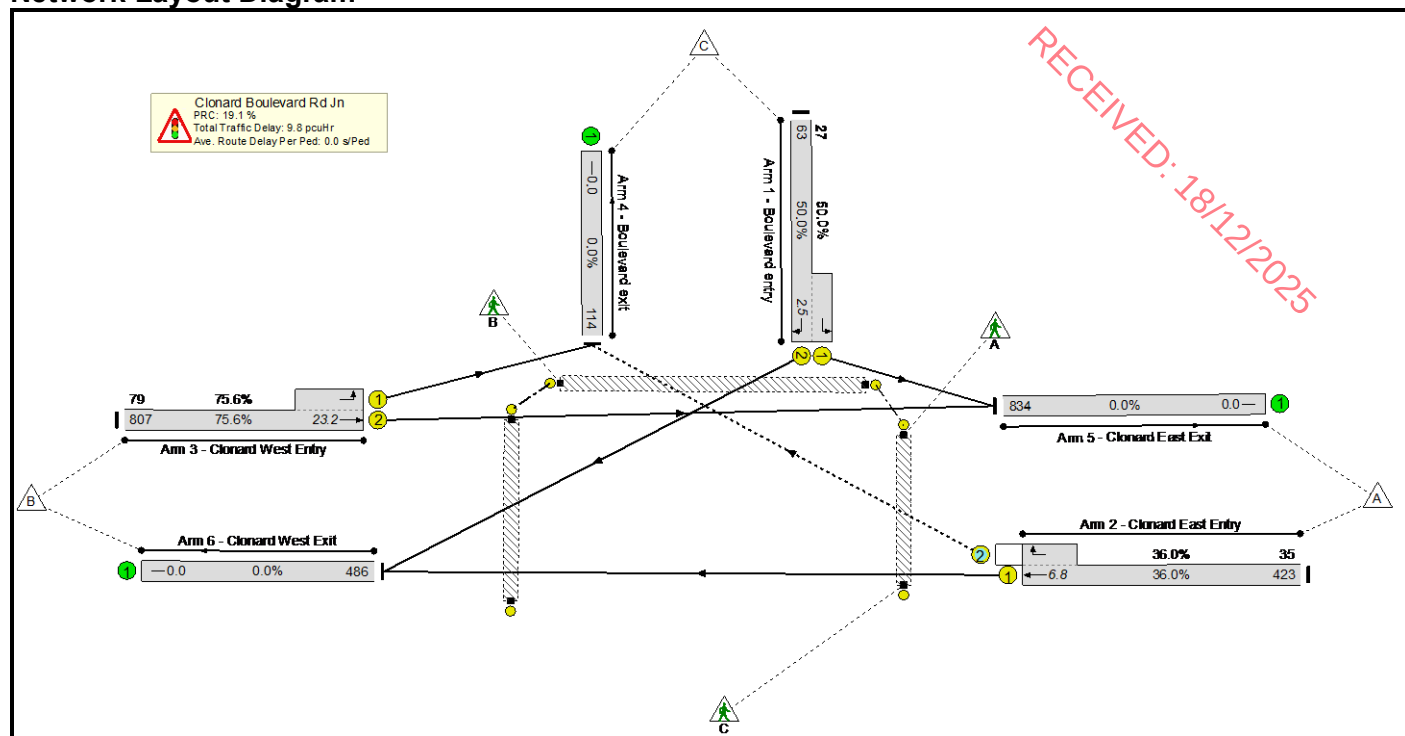
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	67.0%	58	4	1	13.3	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	67.0%	58	4	1	13.3	-	-
1/2+1/1	Boulevard entry Right	U	B	H	1	14:22	8	-	254	1891:1598	185+194	67.0 : 67.0%	-	-	-	4.2	60.0	4.9
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	69	4	-	770	1965:1914	1065+95	66.4 : 66.4%	58	4	1	4.7	21.9	17.7
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	60	-	-	642	2105:1618	832+215	61.3 : 61.3%	-	-	-	4.3	24.4	14.3
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 34.4 Total Delay for Signalled Lanes (pcuHr): 13.26 Cycle Time (s): 120 PRC Over All Lanes (%): 34.4 Total Delay Over All Lanes(pcuHr): 13.26																		

Basic Results Summary

Scenario 6: 'DN 2042' (FG6: 'YoO+15 DN (2042) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

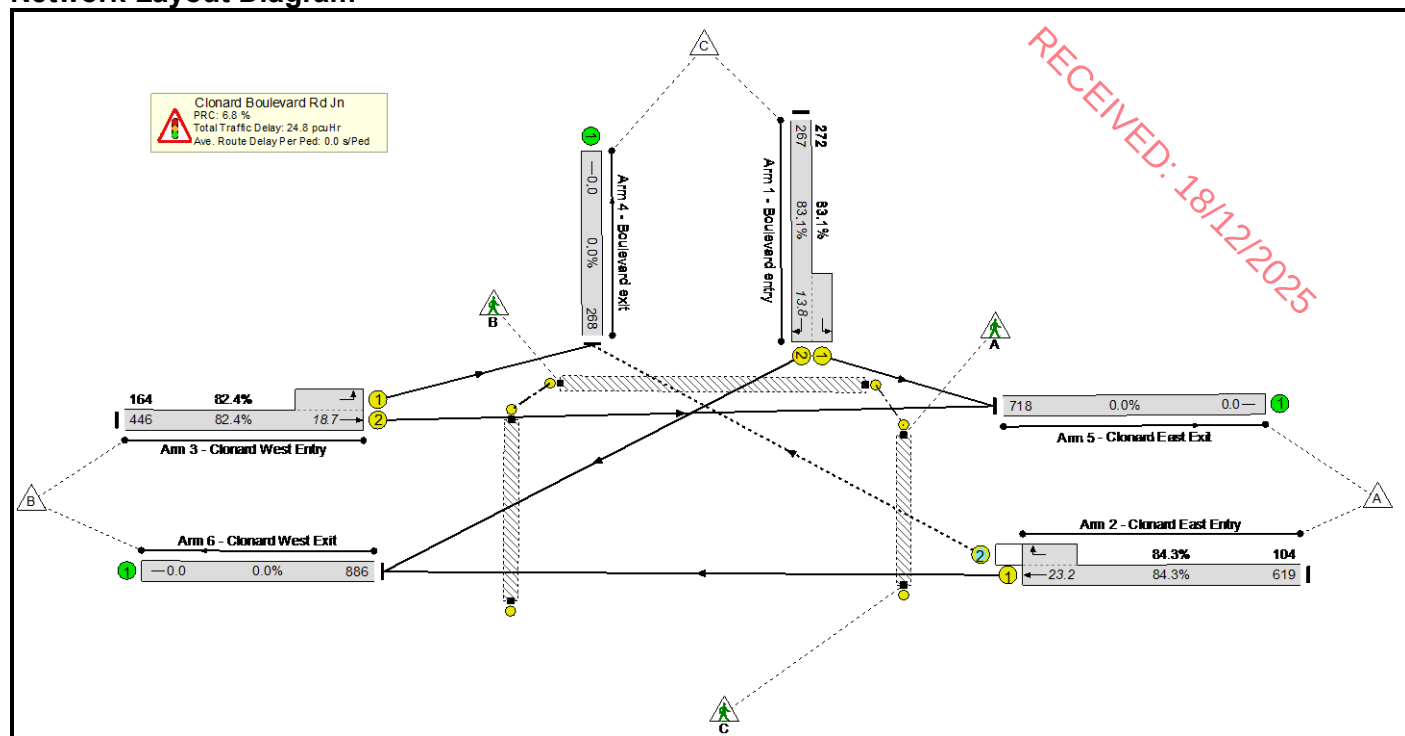
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	75.6%	32	2	1	9.8	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	75.6%	32	2	1	9.8	-	-
1/2+1/1	Boulevard entry Left Right	U	B	H	1	7:15	8	-	90	1891:1598	126+54	50.0 : 50.0%	-	-	-	1.8	71.4	2.5
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	76	4	-	458	1965:1914	1177+97	36.0 : 36.0%	32	2	1	1.7	13.5	6.8
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	67	-	-	886	2105:1618	1068+105	75.6 : 75.6%	-	-	-	6.3	25.6	23.2
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 19.1 PRC Over All Lanes (%): 19.1 Total Delay for Signalled Lanes (pcuHr): 9.80 Total Delay Over All Lanes(pcuHr): 9.80 Cycle Time (s): 120																		

Basic Results Summary

Scenario 7: 'DM 2027' (FG7: 'YoO DM (2027) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

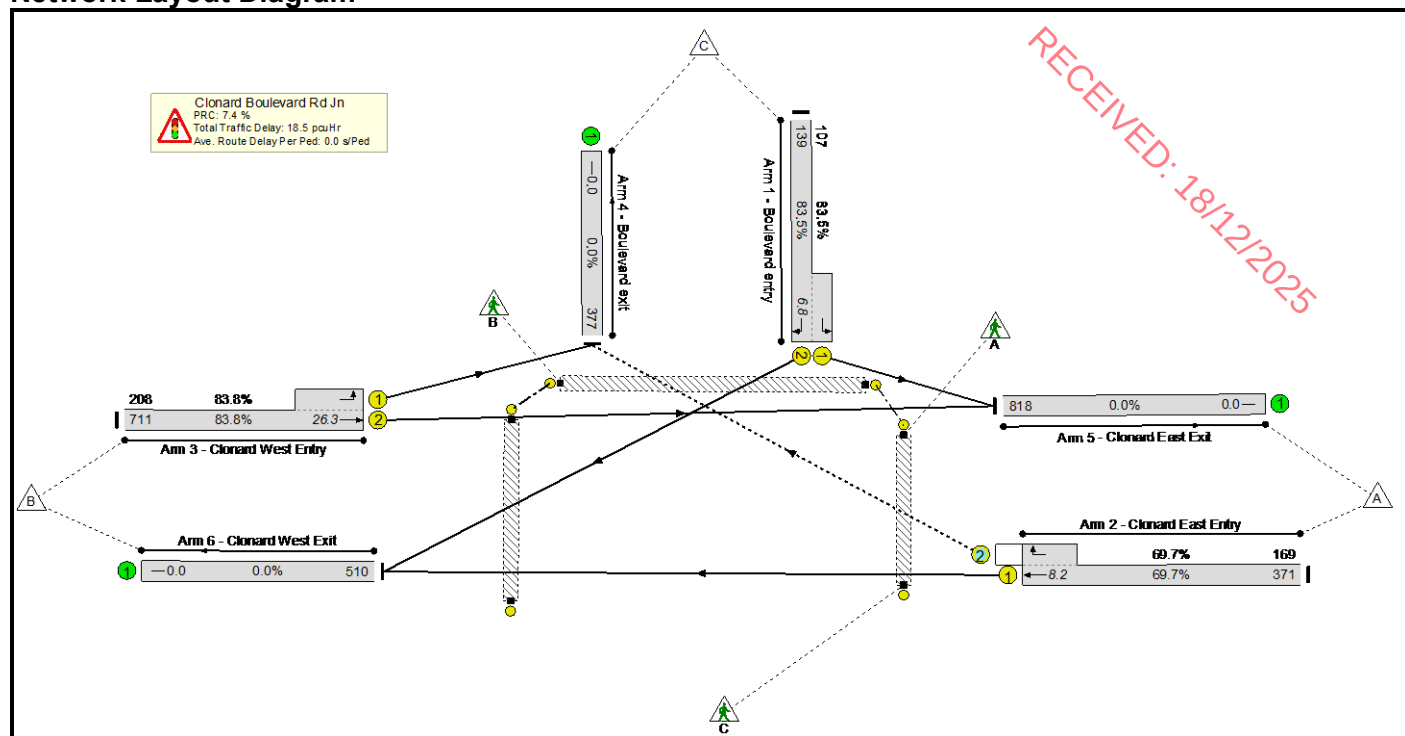
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	84.3%	69	33	2	24.8	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	84.3%	69	33	2	24.8	-	-
1/2+1/1	Boulevard entry Right	U	B	H	1	33:41	8	-	539	1891:1598	321+327	83.1 : 83.1%	-	-	-	7.6	50.8	13.8
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	50	4	-	723	1965:1914	735+123	84.3 : 84.3%	69	33	2	9.2	45.6	23.2
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	41	-	-	610	2105:1618	542+199	82.4 : 82.4%	-	-	-	8.0	47.4	18.7
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 6.8 Total Delay for Signalled Lanes (pcuHr): 24.79 Cycle Time (s): 120 PRC Over All Lanes (%): 6.8 Total Delay Over All Lanes(pcuHr): 24.79																		

Basic Results Summary

Scenario 8: 'DM 2027' (FG8: 'YoO DM (2027) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

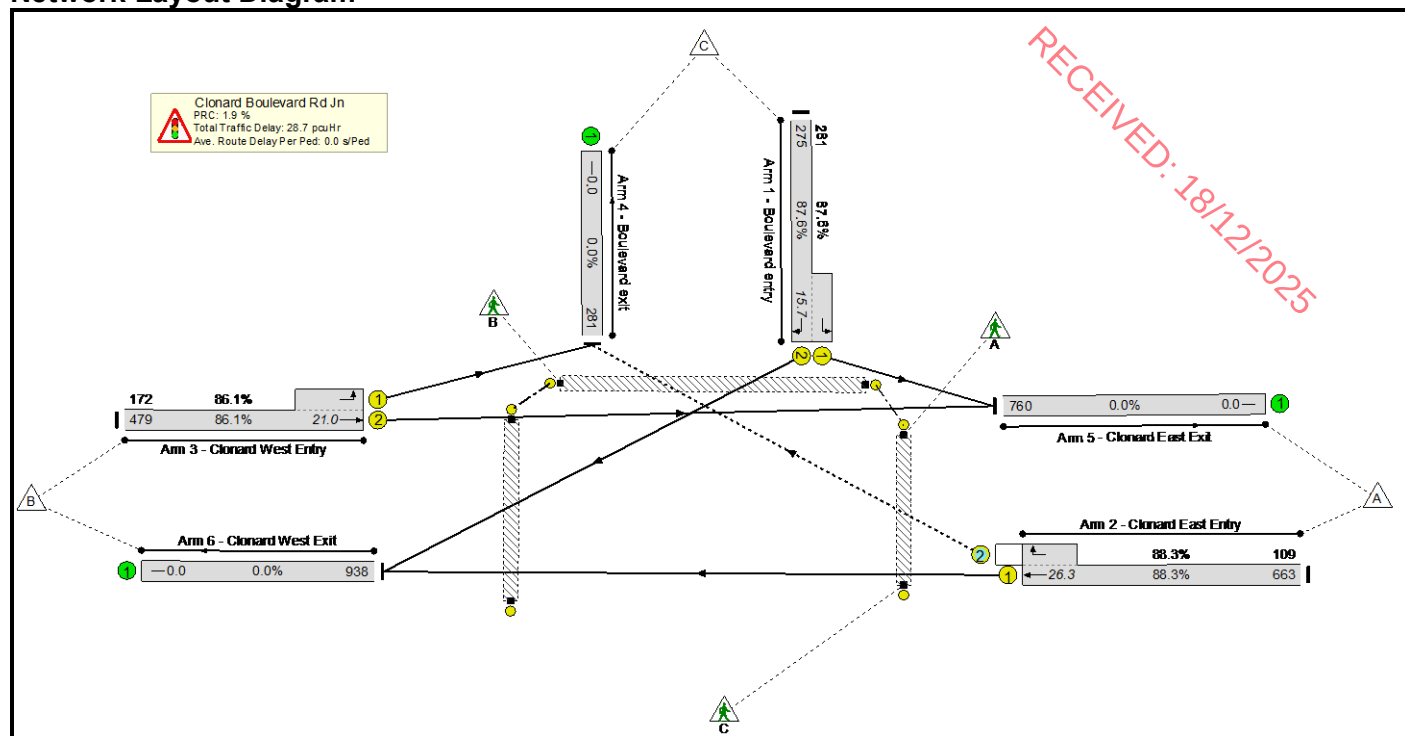
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	83.8%	71	95	3	18.5	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	83.8%	71	95	3	18.5	-	-
1/2+1/1	Boulevard entry Right	U	B	H	1	11:19	8	-	246	1891:1598	166+128	83.5 : 83.5%	-	-	-	5.7	82.9	6.8
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	72	4	-	540	1965:1914	532+242	69.7 : 69.7%	71	95	3	4.6	30.6	8.2
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	63	-	-	919	2105:1618	849+248	83.8 : 83.8%	-	-	-	8.2	32.2	26.3
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 7.4 Total Delay for Signalled Lanes (pcuHr): 18.47 Cycle Time (s): 120 PRC Over All Lanes (%): 7.4 Total Delay Over All Lanes(pcuHr): 18.47																		

Basic Results Summary

Scenario 9: 'DM 2032' (FG9: 'YoO+5 DM (2032) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

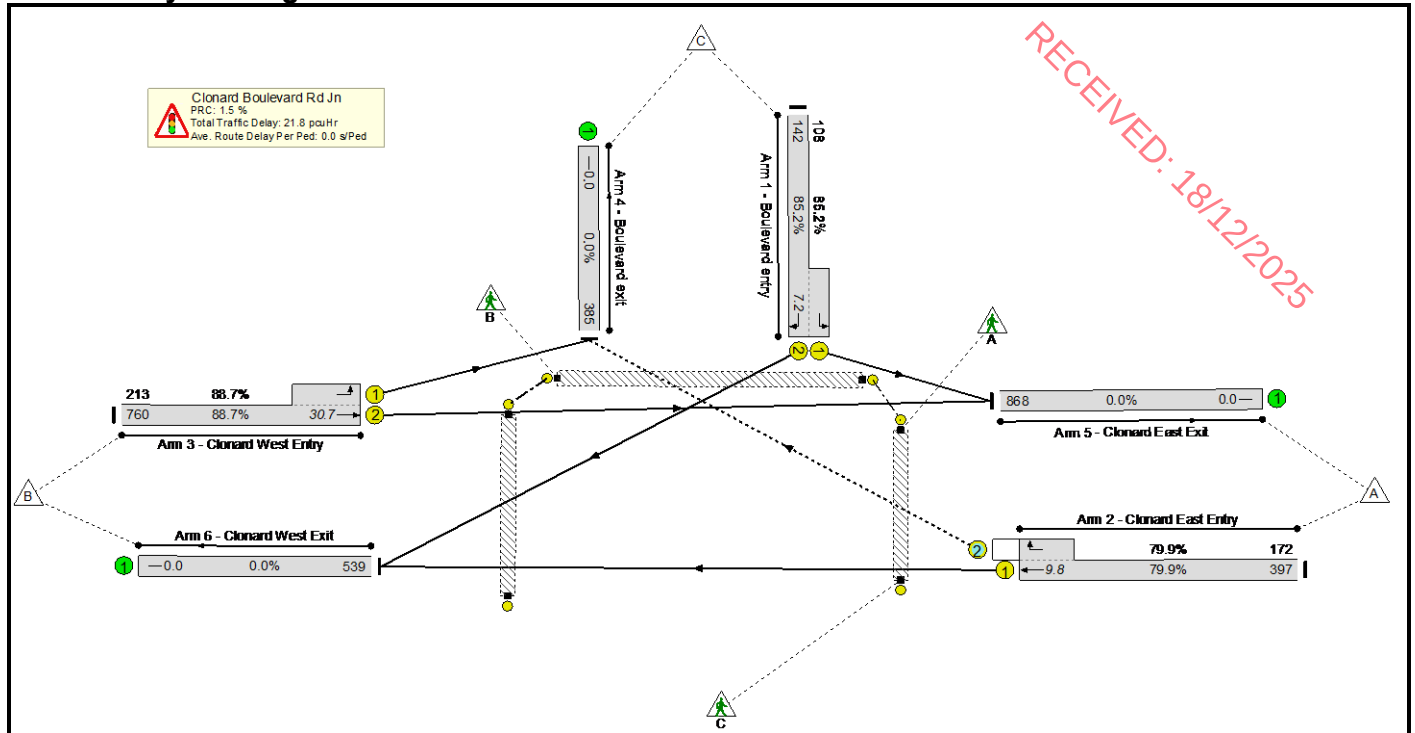
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	88.3%	53	54	2	28.7	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	88.3%	53	54	2	28.7	-	-
1/2+1/1	Boulevard entry Right	U	B	H	1	32:40	8	-	556	1891:1598	314+321	87.6 : 87.6%	-	-	-	8.9	57.5	15.7
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	51	4	-	772	1965:1914	750+123	88.3 : 88.3%	53	54	2	10.7	49.8	26.3
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	42	-	-	651	2105:1618	557+200	86.1 : 86.1%	-	-	-	9.1	50.4	21.0
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 1.9 Total Delay for Signalled Lanes (pcuHr): 28.68 Cycle Time (s): 120 PRC Over All Lanes (%): 1.9 Total Delay Over All Lanes(pcuHr): 28.68																		

Basic Results Summary

Scenario 10: 'DM 2032' (FG10: 'YoO+5 DM (2032) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

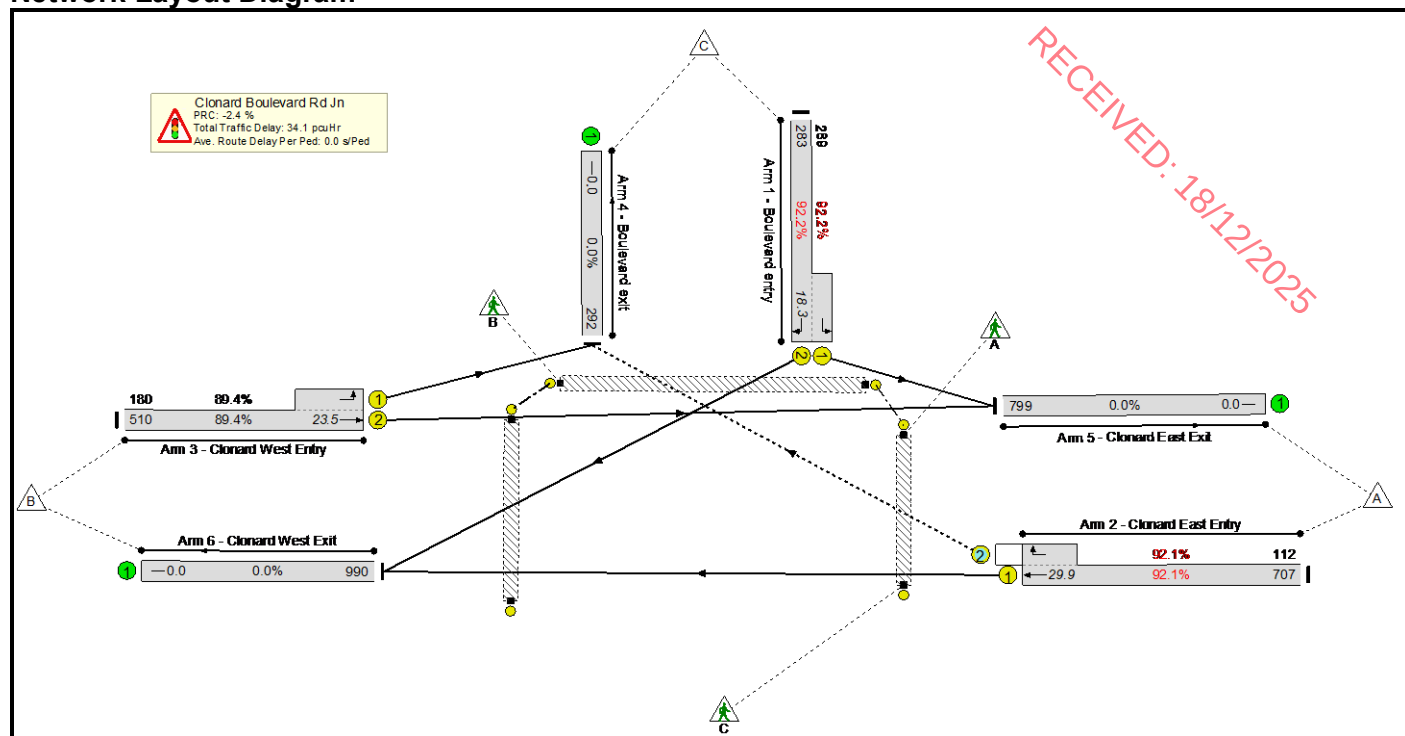
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	88.7%	44	112	17	21.8	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	88.7%	44	112	17	21.8	-	-
1/2+1/1	Boulevard entry Right	U	B	H	1	11:19	8	-	250	1891:1598	167+127	85.2 : 85.2%	-	-	-	6.0	86.3	7.2
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	72	4	-	569	1965:1914	497+215	79.9 : 79.9%	44	112	17	5.7	36.1	9.8
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	63	-	-	973	2105:1618	857+240	88.7 : 88.7%	-	-	-	10.1	37.3	30.7
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 1.5 Total Delay for Signalled Lanes (pcuHr): 21.77 Cycle Time (s): 120 PRC Over All Lanes (%): 1.5 Total Delay Over All Lanes(pcuHr): 21.77																		

Basic Results Summary

Scenario 11: 'DM 2042' (FG11: 'YoO+15 DM (2042) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

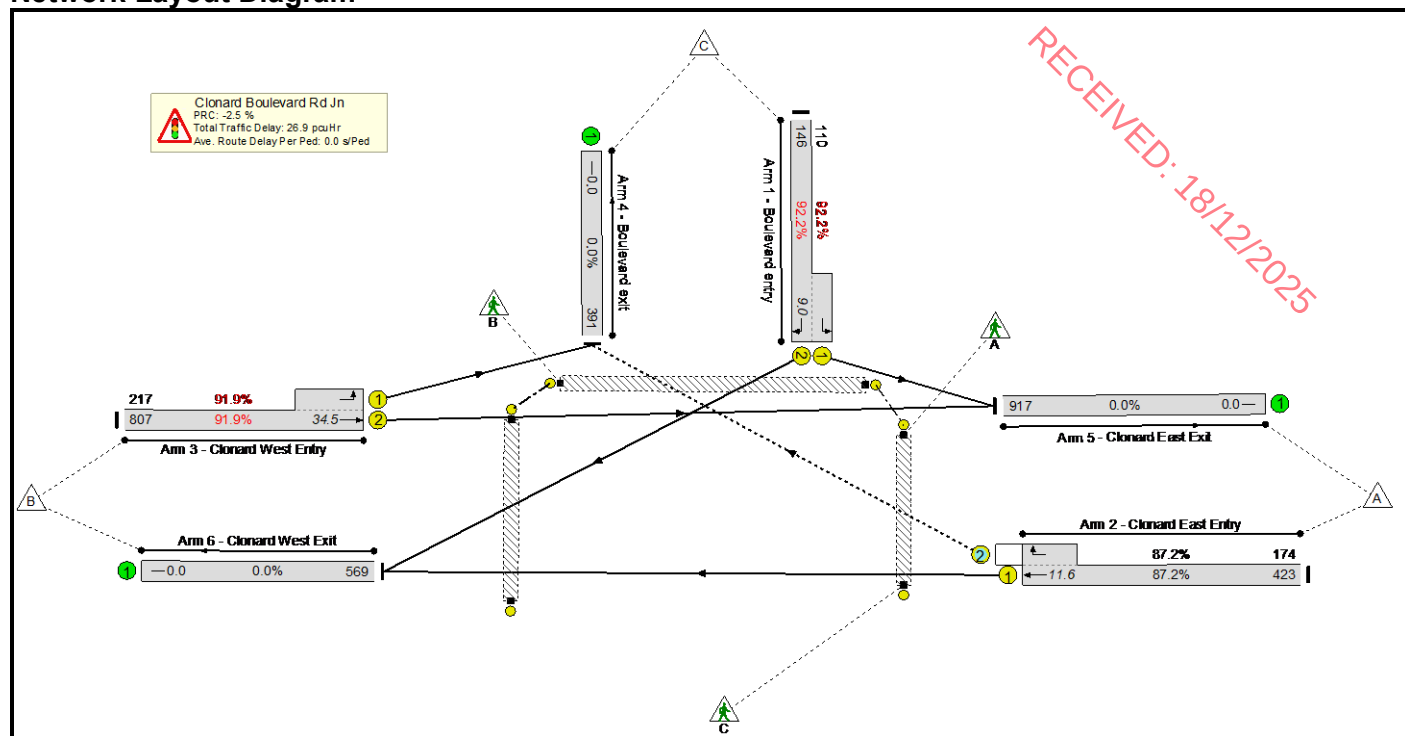
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	92.2%	39	71	2	34.1	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	92.2%	39	71	2	34.1	-	-
1/2+1/1	Boulevard entry Right	U	B	H	1	31:39	8	-	572	1891:1598	307+313	92.2 : 92.2%	-	-	-	10.9	68.8	18.3
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	52	4	-	819	1965:1914	768+122	92.1 : 92.1%	39	71	2	12.7	55.9	29.9
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	43	-	-	690	2105:1618	571+201	89.4 : 89.4%	-	-	-	10.4	54.4	23.5
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): -2.4 Total Delay for Signalled Lanes (pcuHr): 34.08 Cycle Time (s): 120 PRC Over All Lanes (%): -2.4 Total Delay Over All Lanes(pcuHr): 34.08																		

Basic Results Summary

Scenario 12: 'DM 2042' (FG12: 'YoO+15 DM (2042) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

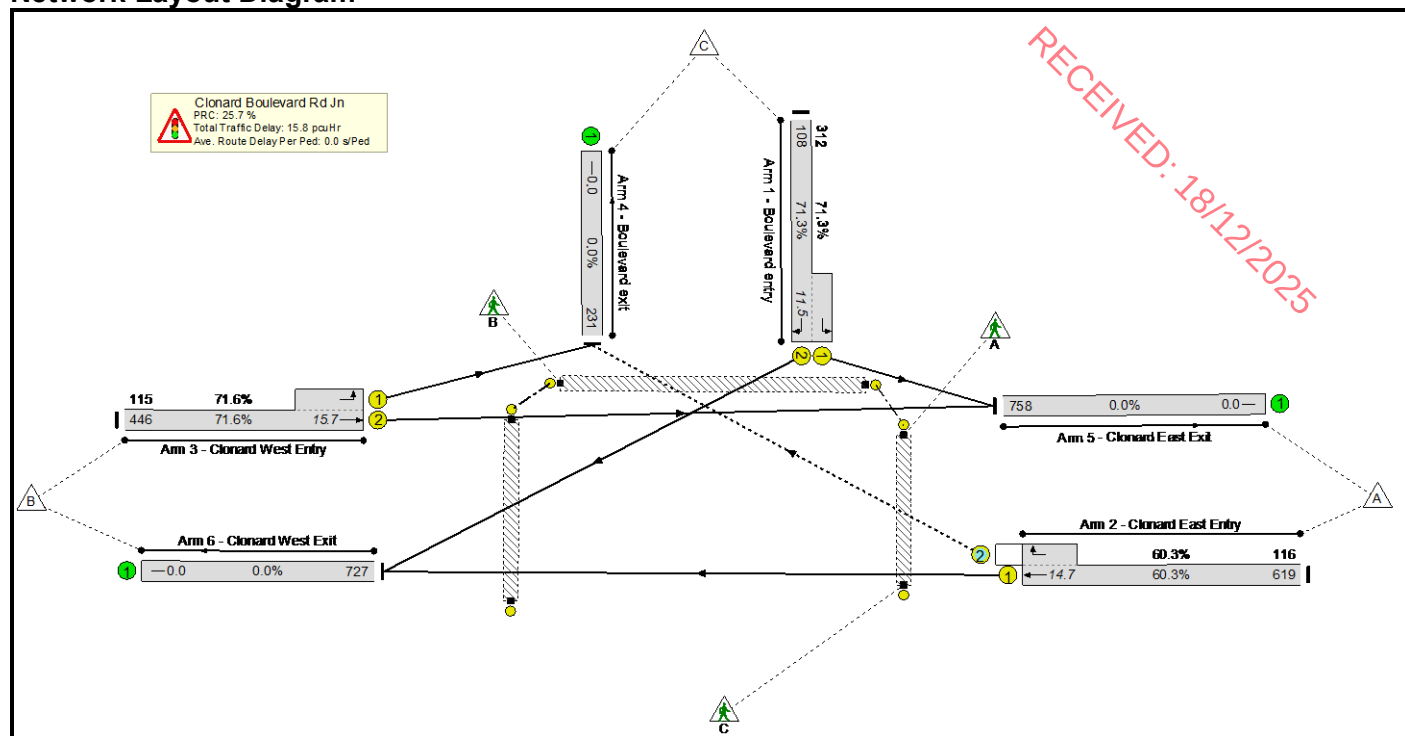
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	92.2%	28	112	34	26.9	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	92.2%	28	112	34	26.9	-	-
1/2+1/1	Boulevard entry Right	U	B	H	1	10:18	8	-	256	1891:1598	158+119	92.2 : 92.2%	-	-	-	7.8	110.0	9.0
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	73	4	-	597	1965:1914	485+200	87.2 : 87.2%	28	112	34	7.1	42.9	11.6
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	64	-	-	1024	2105:1618	878+236	91.9 : 91.9%	-	-	-	11.9	42.0	34.5
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): -2.5 Total Delay for Signalled Lanes (pcuHr): 26.87 Cycle Time (s): 120 PRC Over All Lanes (%): -2.5 Total Delay Over All Lanes(pcuHr): 26.87																		

Basic Results Summary

Scenario 13: 'DS 2027' (FG13: 'YoO DS (2027) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

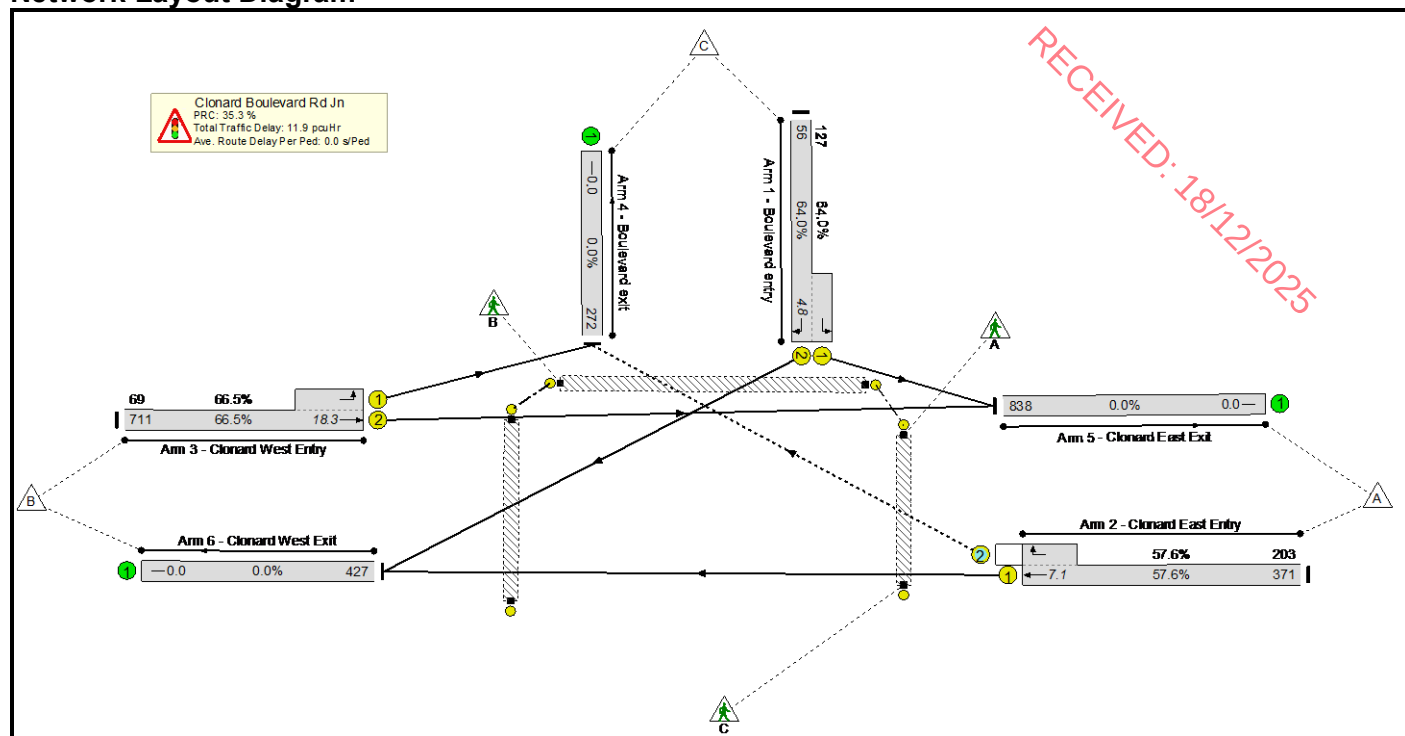
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	71.6%	89	25	2	15.8	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	71.6%	89	25	2	15.8	-	-
1/2+1/1	Boulevard entry Left Right	U	B	H	1	11:38	27	-	420	1891:1598	151+438	71.3 : 71.3%	-	-	-	5.7	49.3	11.5
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	72	23	-	735	1965:1914	1026+192	60.3 : 60.3%	89	25	2	4.0	19.5	14.7
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	44	-	-	561	2105:1618	623+161	71.6 : 71.6%	-	-	-	6.1	38.9	15.7
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 25.7 Total Delay for Signalled Lanes (pcuHr): 15.80 Cycle Time (s): 120 PRC Over All Lanes (%): 25.7 Total Delay Over All Lanes(pcuHr): 15.80																		

Basic Results Summary

Scenario 14: 'DS 2027' (FG14: 'YoO DS (2027) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

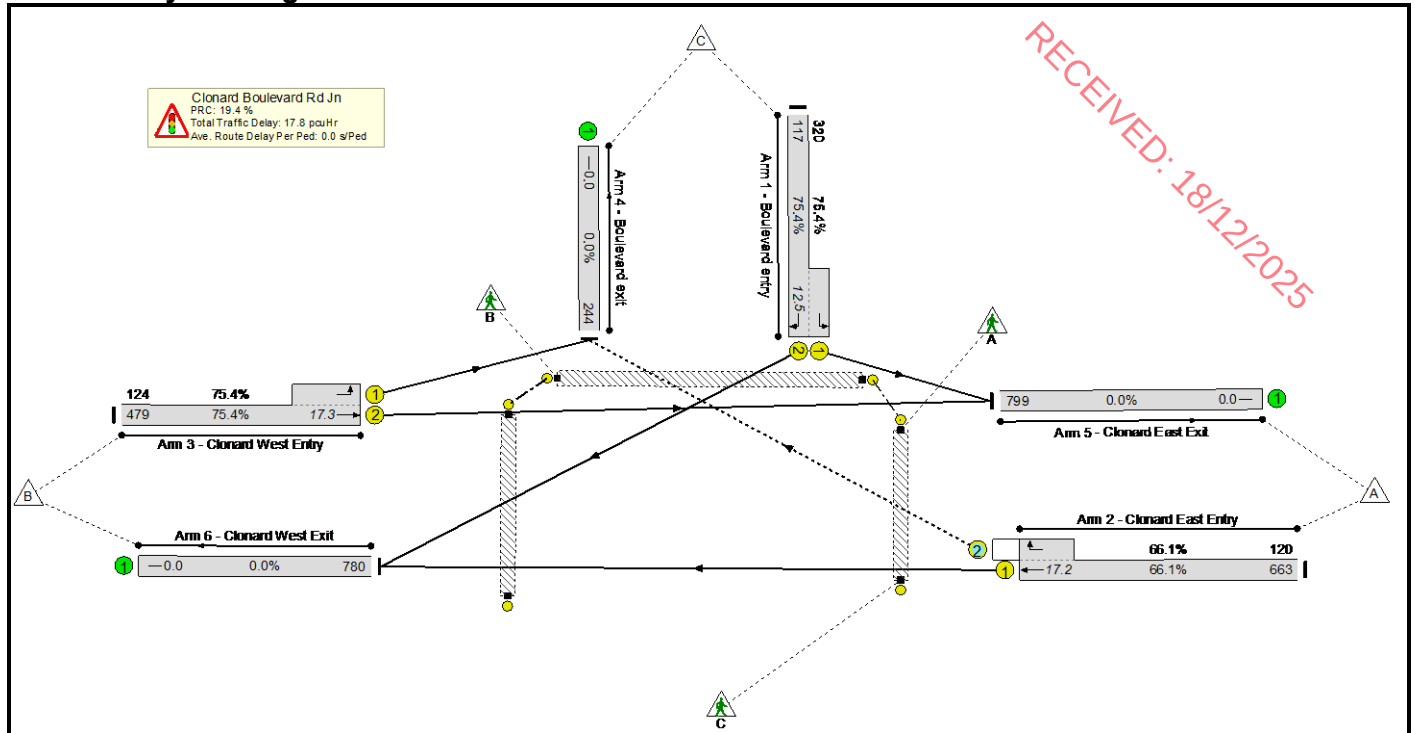
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	66.5%	181	19	3	11.9	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	66.5%	181	19	3	11.9	-	-
1/2+1/1	Boulevard entry Left Right	U	B	H	1	7:15	8	-	183	1891:1598	88+199	64.0 : 64.0%	-	-	-	3.4	67.6	4.8
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	76	4	-	574	1965:1914	645+353	57.6 : 57.6%	181	19	3	3.6	22.7	7.1
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	67	-	-	780	2105:1618	1069+104	66.5 : 66.5%	-	-	-	4.8	22.3	18.3
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 35.3 Total Delay for Signalled Lanes (pcuHr): 11.89 Cycle Time (s): 120 PRC Over All Lanes (%): 35.3 Total Delay Over All Lanes(pcuHr): 11.89																		

Basic Results Summary

Scenario 15: 'DS 2032' (FG15: 'YoO+5 DS (2032) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

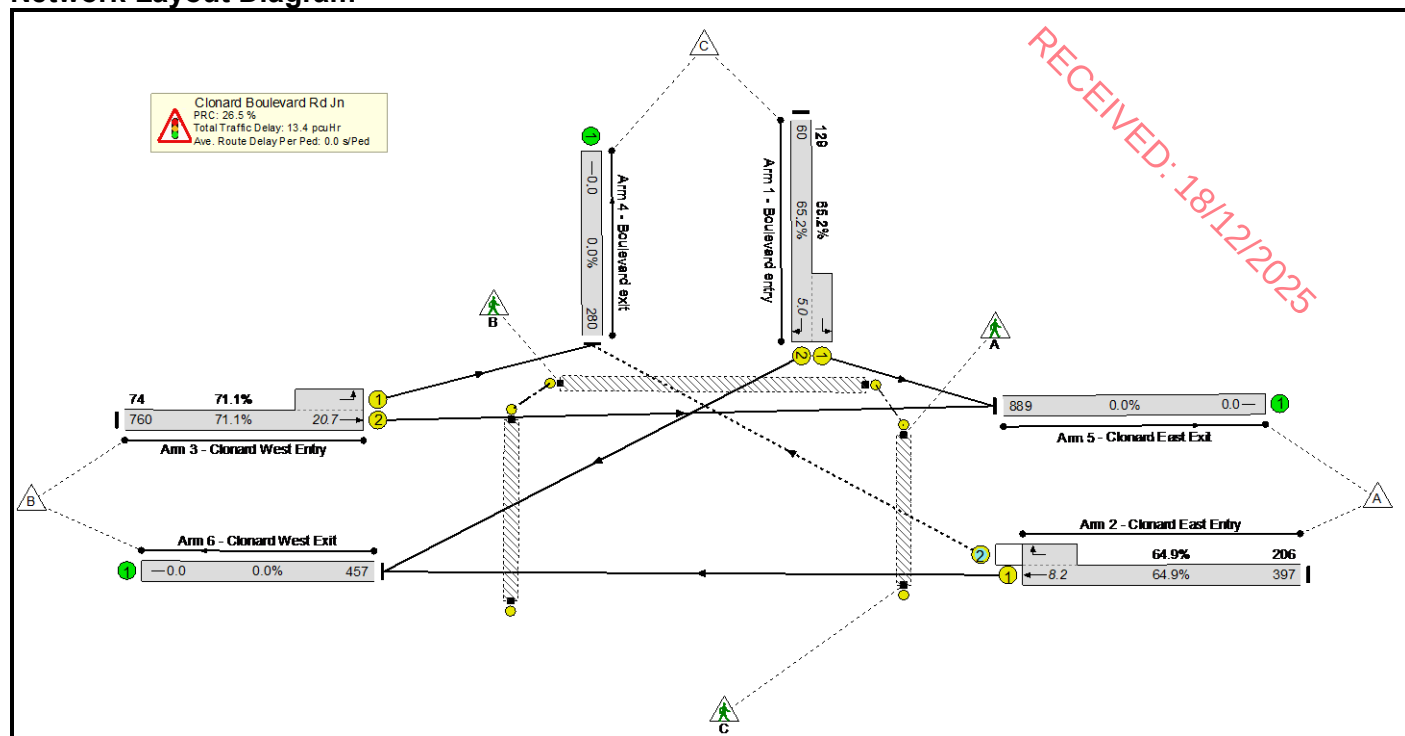
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	75.4%	95	23	2	17.8	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	75.4%	95	23	2	17.8	-	-
1/2+1/1	Boulevard entry Left Right	U	B	H	1	13:37	24	-	437	1891:1598	155+425	75.4 : 75.4%	-	-	-	6.3	51.7	12.5
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	70	20	-	783	1965:1914	1004+182	66.1 : 66.1%	95	23	2	4.9	22.4	17.2
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	45	-	-	603	2105:1618	636+165	75.4 : 75.4%	-	-	-	6.7	39.9	17.3
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 19.4 Total Delay for Signalled Lanes (pcuHr): 17.83 Cycle Time (s): 120 PRC Over All Lanes (%): 19.4 Total Delay Over All Lanes(pcuHr): 17.83																		

Basic Results Summary

Scenario 16: 'DS 2032' (FG16: 'YoO+5 DS (2032) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

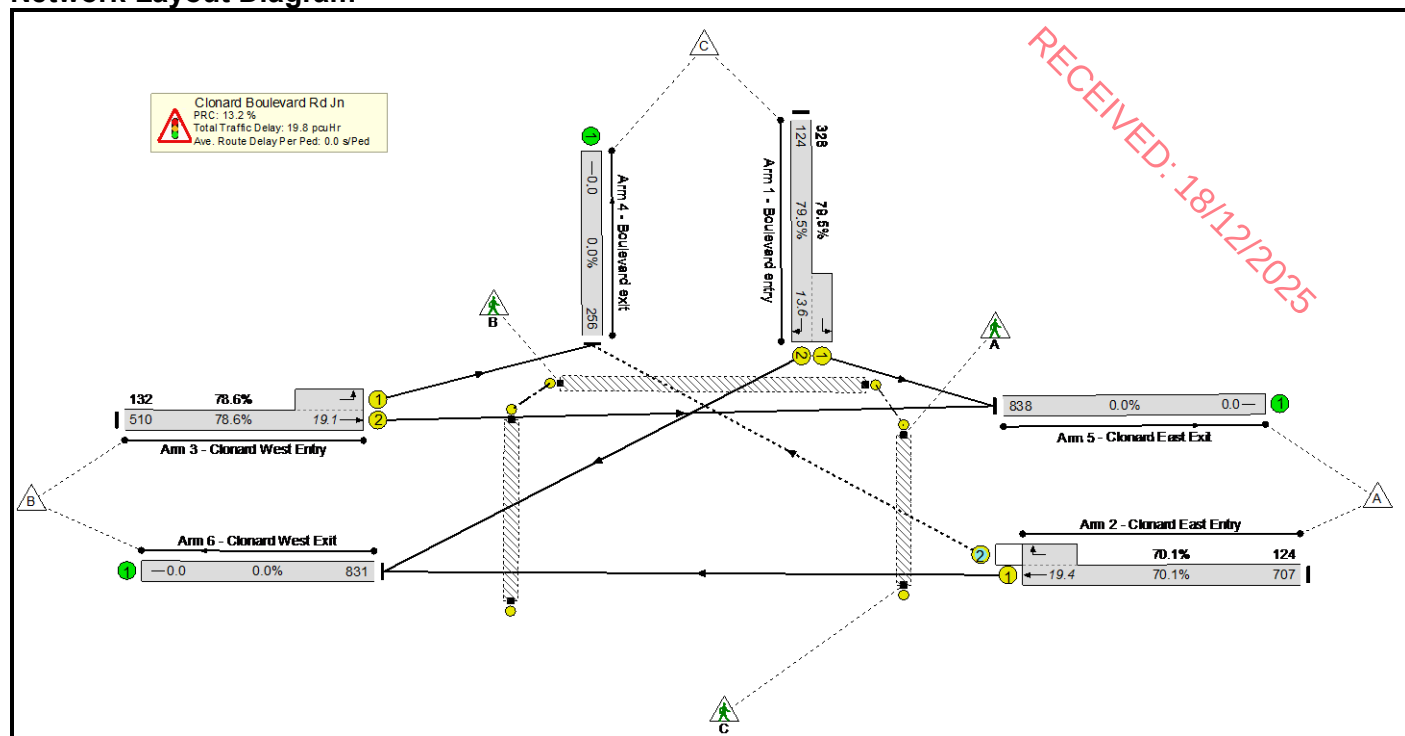
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	71.1%	146	57	3	13.4	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	71.1%	146	57	3	13.4	-	-
1/2+1/1	Boulevard entry Left Right	U	B	H	1	7:15	8	-	189	1891:1598	92+198	65.2 : 65.2%	-	-	-	3.6	68.1	5.0
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	76	4	-	603	1965:1914	611+317	64.9 : 64.9%	146	57	3	4.3	25.5	8.2
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	67	-	-	834	2105:1618	1069+104	71.1 : 71.1%	-	-	-	5.5	23.8	20.7
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 26.5 Total Delay for Signalled Lanes (pcuHr): 13.37 Cycle Time (s): 120 PRC Over All Lanes (%): 26.5 Total Delay Over All Lanes(pcuHr): 13.37																		

Basic Results Summary

Scenario 17: 'DS 2042' (FG17: 'YoO+15 DS (2042) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

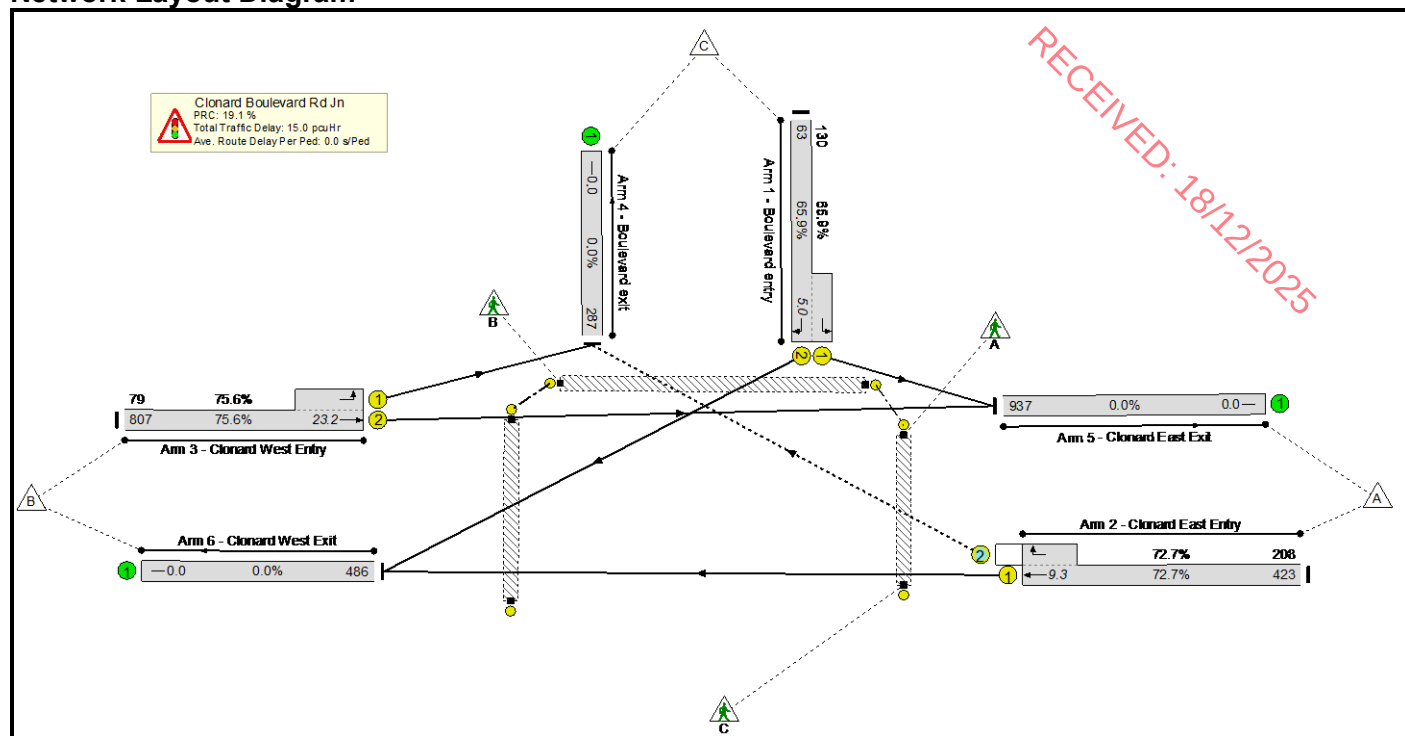
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	79.5%	90	31	2	19.8	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	79.5%	90	31	2	19.8	-	-
1/2+1/1	Boulevard entry Left Right	U	B	H	1	13:36	23	-	452	1891:1598	156+412	79.5 : 79.5%	-	-	-	7.0	55.4	13.6
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	70	19	-	831	1965:1914	1008+177	70.1 : 70.1%	90	31	2	5.5	23.9	19.4
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	46	-	-	642	2105:1618	649+168	78.6 : 78.6%	-	-	-	7.3	41.1	19.1
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 13.2 Total Delay for Signalled Lanes (pcuHr): 19.80 Cycle Time (s): 120 PRC Over All Lanes (%): 13.2 Total Delay Over All Lanes(pcuHr): 19.80																		

Basic Results Summary

Scenario 18: 'DS 2042' (FG18: 'YoO+15 DS (2042) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	75.6%	114	90	3	15.0	-	-
Clonard Boulevard Rd Jn	-	-	-		-	-	-	-	-	-	-	75.6%	114	90	3	15.0	-	-
1/2+1/1	Boulevard entry Left Right	U	B	H	1	7:15	8	-	193	1891:1598	96+197	65.9 : 65.9%	-	-	-	3.7	68.4	5.0
2/1+2/2	Clonard East Entry Right Ahead	U+O	D	C	1	76	4	-	631	1965:1914	582+286	72.7 : 72.7%	114	90	3	5.0	28.8	9.3
3/2+3/1	Clonard West Entry Left Ahead	U	A		1	67	-	-	886	2105:1618	1068+105	75.6 : 75.6%	-	-	-	6.3	25.6	23.2
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 19.1 Total Delay for Signalled Lanes (pcuHr): 15.00 Cycle Time (s): 120 PRC Over All Lanes (%): 19.1 Total Delay Over All Lanes(pcuHr): 15.00																		

J4 -R122 / Castlemill Road/ Stephenstown Link Road Junction Modelling Report

REMOVED: 18/12/2025

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site_4_v0.1.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

RECEIVED: 18/12/2025

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	Base 2025	Base (2025) AM	Network Control Plan 1	08:00 - 09:00	90	15.7	19.71
2	Base 2025	Base (2025) PM	Network Control Plan 1	16:45 - 17:45	90	44.2	14.09
3	DN 2027	YoO DN (2027) AM	Network Control Plan 1	08:00 - 09:00	90	11.5	21.24
4	DN 2027	YoO DN (2027) PM	Network Control Plan 1	16:45 - 17:45	90	38.6	14.84
5	DN 2032	YoO+5 DN (2032) AM	Network Control Plan 1	08:00 - 09:00	90	4.2	25.08
6	DN 2032	YoO+5 DN (2032) PM	Network Control Plan 1	16:45 - 17:45	90	29.9	16.41
7	DN 2042	YoO+15 DN (2042) AM	Network Control Plan 1	08:00 - 09:00	90	-2.4	30.93
8	DN 2042	YoO+15 DN (2042) PM	Network Control Plan 1	16:45 - 17:45	90	22.3	18.10
9	DM 2027	YoO DM (2027) AM	Network Control Plan 1	08:00 - 09:00	90	3.8	27.49
10	DM 2027	YoO DM (2027) PM	Network Control Plan 1	16:45 - 17:45	90	20.3	18.70
11	DM 2032	YoO+5 DM (2032) AM	Network Control Plan 1	08:00 - 09:00	90	-2.4	33.75
12	DM 2032	YoO+5 DM (2032) PM	Network Control Plan 1	16:45 - 17:45	90	13.1	20.85
13	DM 2042	YoO+15 DM (2042) AM	Network Control Plan 1	08:00 - 09:00	90	-8.9	44.37
14	DM 2042	YoO+15 DM (2042) PM	Network Control Plan 1	16:45 - 17:45	90	7.8	23.76
15	DS 2027	YoO DS (2027) AM	Network Control Plan 1	08:00 - 09:00	90	-0.9	30.77
16	DS 2027	YoO DS (2027) PM	Network Control Plan 1	16:45 - 17:45	90	17.6	20.15
17	DS 2032	YoO+5 DS (2032) AM	Network Control Plan 1	08:00 - 09:00	90	-8.2	39.92
18	DS 2032	YoO+5 DS (2032) PM	Network Control Plan 1	16:45 - 17:45	90	12.1	22.55
19	DS 2042	YoO+15 DS (2042) AM	Network Control Plan 1	08:00 - 09:00	90	-13.9	59.72
20	DS 2042	YoO+15 DS (2042) PM	Network Control Plan 1	16:45 - 17:45	90	5.8	25.51

Scenario 1: 'Base 2025' (FG1: 'Base (2025) AM', Plan 1: 'Network Control Plan 1')
Network Layout Diagram



Basic Results Summary

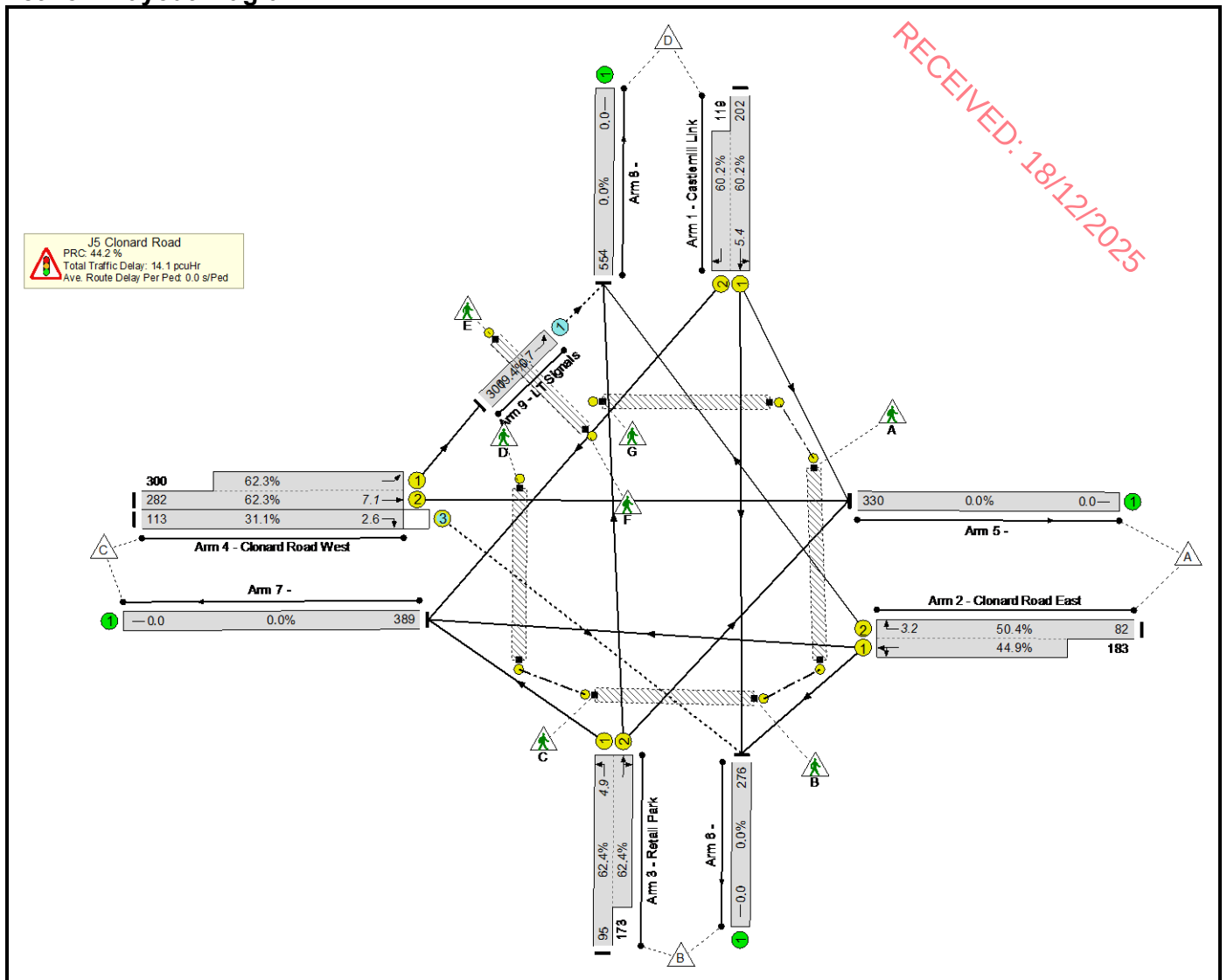
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	77.8%	84	207	4	19.7	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	77.8%	84	207	4	19.7	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	17	-	-	549	1904:1830	381+366	76.9 : 69.9%	-	-	-	6.5	42.8	8.3
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:16	-	-	343	1830:1922	57+384	77.8 : 77.8%	-	-	-	4.0	41.9	6.6
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	20:10	-	-	292	1707:2053	156+251	71.7 : 71.7%	-	-	-	4.0	49.6	5.5
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	19:69	-	-	373	1940:1853	431+228	56.6 : 56.6%	-	-	-	2.8	27.5	6.1
4/3	Clonard Road West Right	O	B	C	1	19	5	-	166	1840	300	55.3%	57	106	4	2.3	49.4	4.4
9/1	LT Signals Left	O	-		-	-	-	-	129	1853	1569	8.2%	27	102	0	0.0	1.2	0.0
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		15.7		15.7		Total Delay for Signalled Lanes (pcuHr):			19.67		Cycle Time (s):		90		
			PRC Over All Lanes (%):						Total Delay Over All Lanes(pcuHr):			19.71						

Basic Results Summary

Scenario 2: 'Base 2025' (FG2: 'Base (2025) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

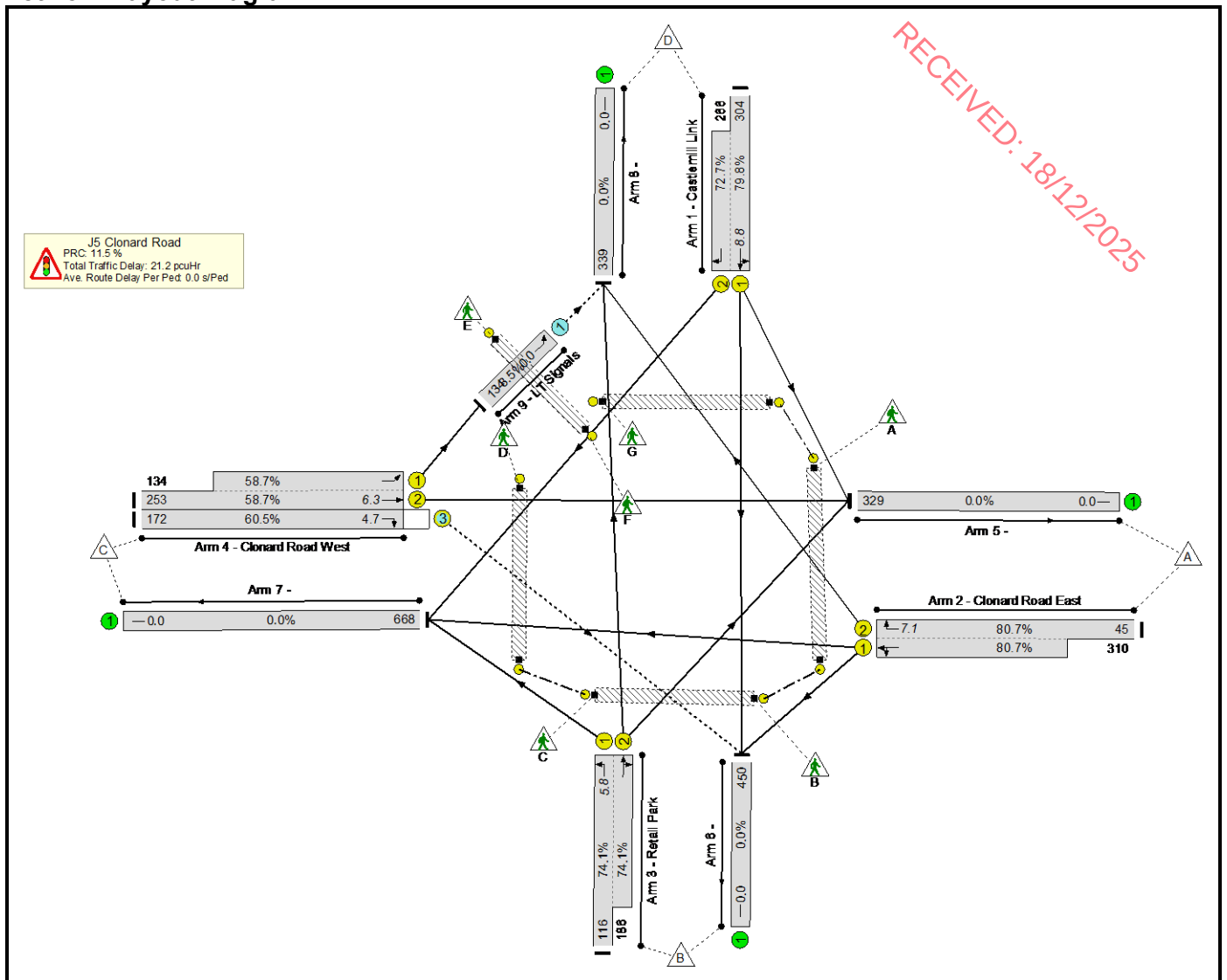
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	62.4%	167	243	3	14.1	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	62.4%	167	243	3	14.1	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	15	-	-	321	1889:1830	336+198	60.2 : 60.2%	-	-	-	3.7	41.9	5.4
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:17	-	-	265	1830:1929	163+407	50.4 : 44.9%	-	-	-	2.2	30.5	3.2
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	21:11	-	-	268	1707:2079	152+277	62.4 : 62.4%	-	-	-	3.3	44.5	4.9
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	20:69	-	-	582	1940:1853	453+482	62.3 : 62.3%	-	-	-	3.5	21.5	7.1
4/3	Clonard Road West Right	O	B	C	1	20	5	-	113	1840	363	31.1%	100	10	3	1.2	38.3	2.6
9/1	LT Signals Left	O	-		-	-	-	-	300	1853	1544	19.4%	67	233	0	0.1	1.5	0.7
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1																		
PRC for Signalled Lanes (%): 44.2								Total Delay for Signalled Lanes (pcuHr): 13.96				Cycle Time (s): 90						
PRC Over All Lanes (%): 44.2								Total Delay Over All Lanes(pcuHr): 14.09										

Basic Results Summary

Scenario 3: 'DN 2027' (FG3: 'YoO DN (2027) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

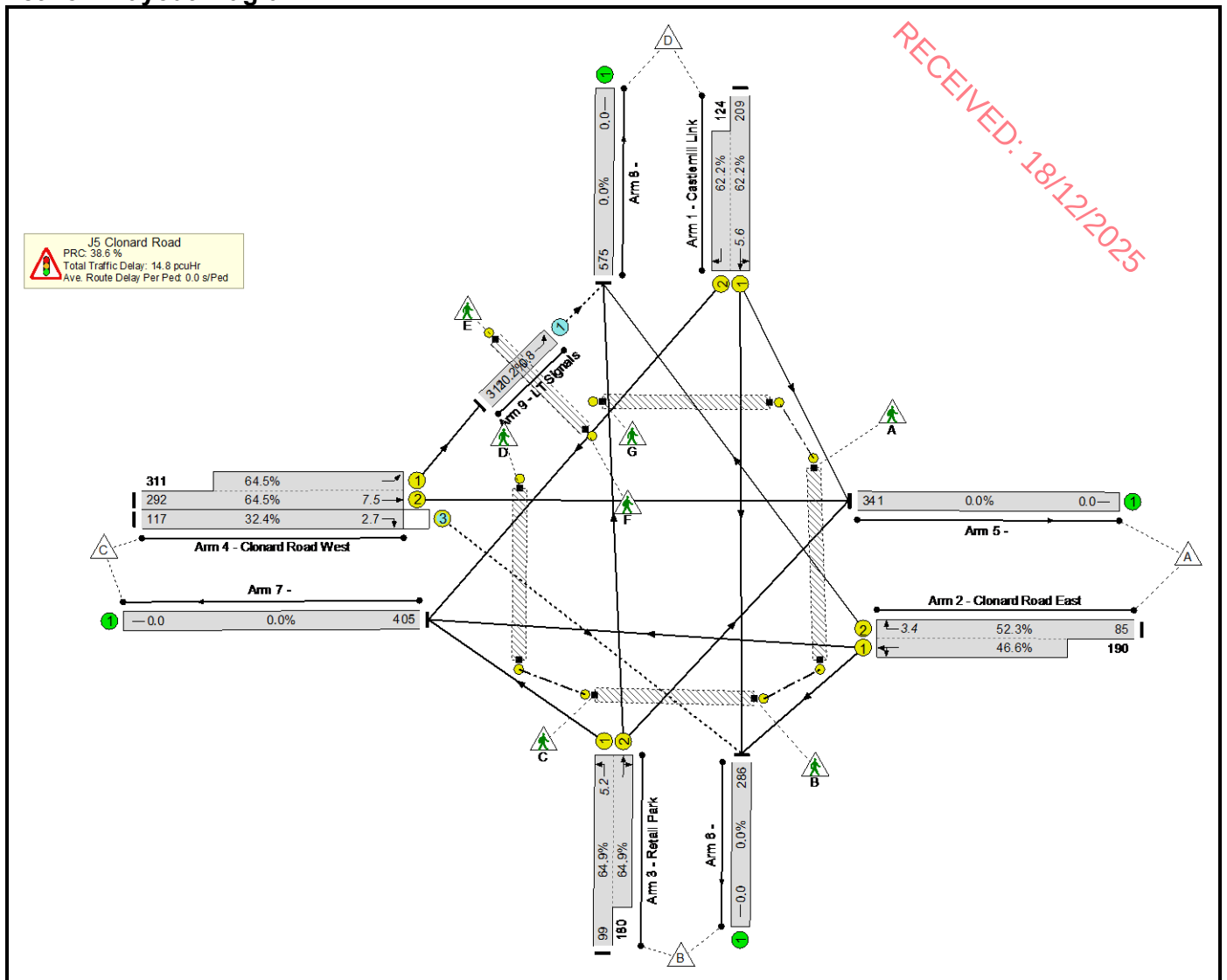
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	80.7%	77	225	4	21.2	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	80.7%	77	225	4	21.2	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	17	-	-	570	1904:1830	381+366	79.8 : 72.7%	-	-	-	7.0	44.0	8.8
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:16	-	-	355	1830:1921	56+384	80.7 : 80.7%	-	-	-	4.4	45.0	7.1
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	20:10	-	-	302	1707:2053	156+251	74.1 : 74.1%	-	-	-	4.3	51.0	5.8
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	19:69	-	-	387	1940:1853	431+228	58.7 : 58.7%	-	-	-	3.0	27.9	6.3
4/3	Clonard Road West Right	O	B	C	1	19	5	-	172	1840	284	60.5%	49	119	4	2.5	52.5	4.7
9/1	LT Signals Left	O	-		-	-	-	-	134	1853	1568	8.5%	28	106	0	0.0	1.3	0.0
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		11.5		11.5		Total Delay for Signalled Lanes (pcuHr):			21.19		Cycle Time (s):		90		
			PRC Over All Lanes (%):		11.5		11.5		Total Delay Over All Lanes(pcuHr):			21.24						

Basic Results Summary

Scenario 4: 'DN 2027' (FG4: 'YoO DN (2027) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

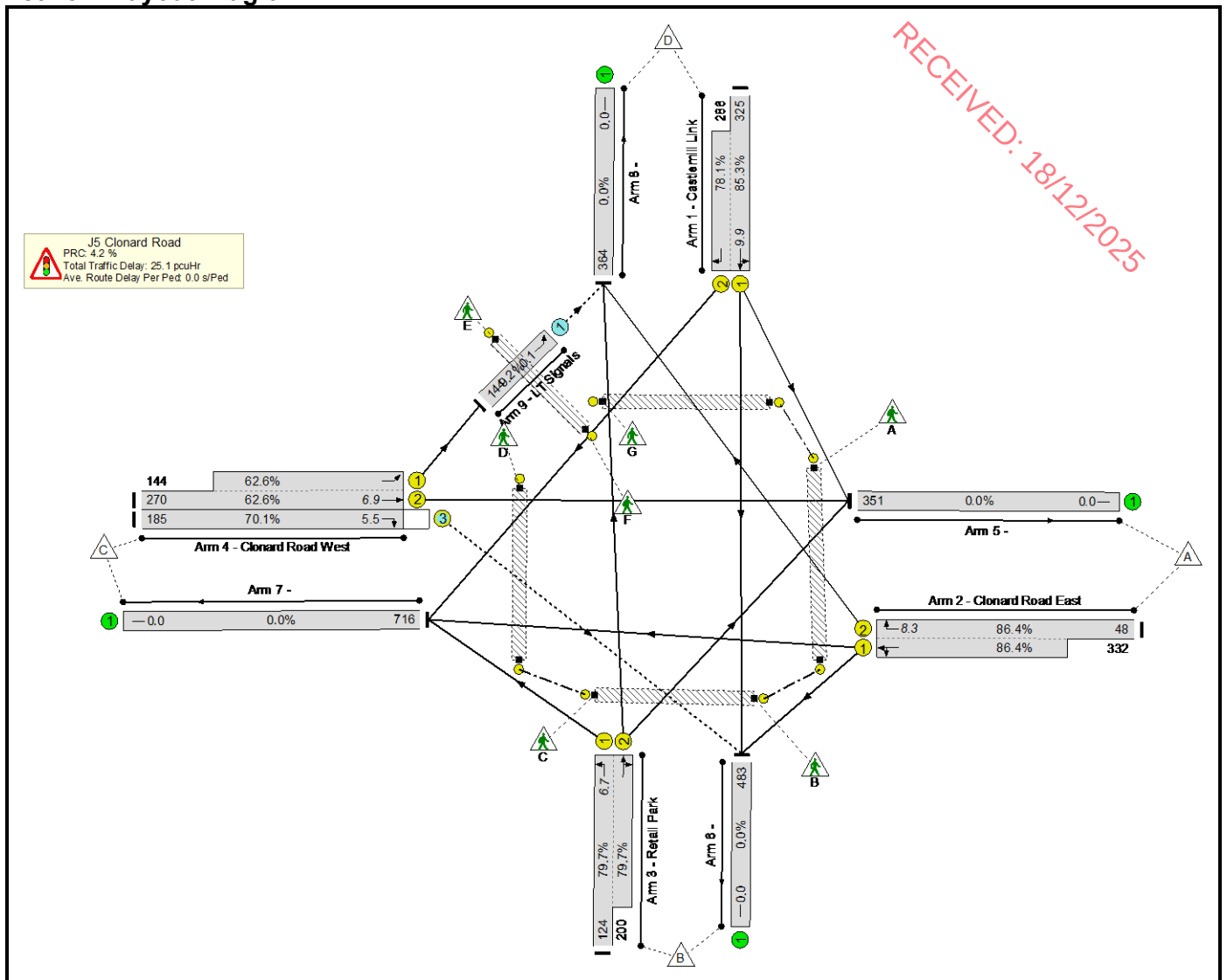
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	64.9%	173	252	3	14.8	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	64.9%	173	252	3	14.8	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	15	-	-	333	1890:1830	336+199	62.2 : 62.2%	-	-	-	3.9	42.5	5.6
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:17	-	-	275	1830:1930	163+407	52.3 : 46.6%	-	-	-	2.3	30.7	3.4
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	21:11	-	-	279	1707:2079	152+277	64.9 : 64.9%	-	-	-	3.5	45.4	5.2
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	20:69	-	-	603	1940:1853	453+482	64.5 : 64.5%	-	-	-	3.7	21.9	7.5
4/3	Clonard Road West Right	O	B	C	1	20	5	-	117	1840	361	32.4%	104	10	3	1.3	38.7	2.7
9/1	LT Signals Left	O	-		-	-	-	-	311	1853	1542	20.2%	69	242	0	0.1	1.5	0.8
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		38.6		38.6		Total Delay for Signalled Lanes (pcuHr):				14.71	Cycle Time (s):		90		
			PRC Over All Lanes (%):						Total Delay Over All Lanes(pcuHr):				14.84					

Basic Results Summary

Scenario 5: 'DN 2032' (FG5: 'YoO+5 DN (2032) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

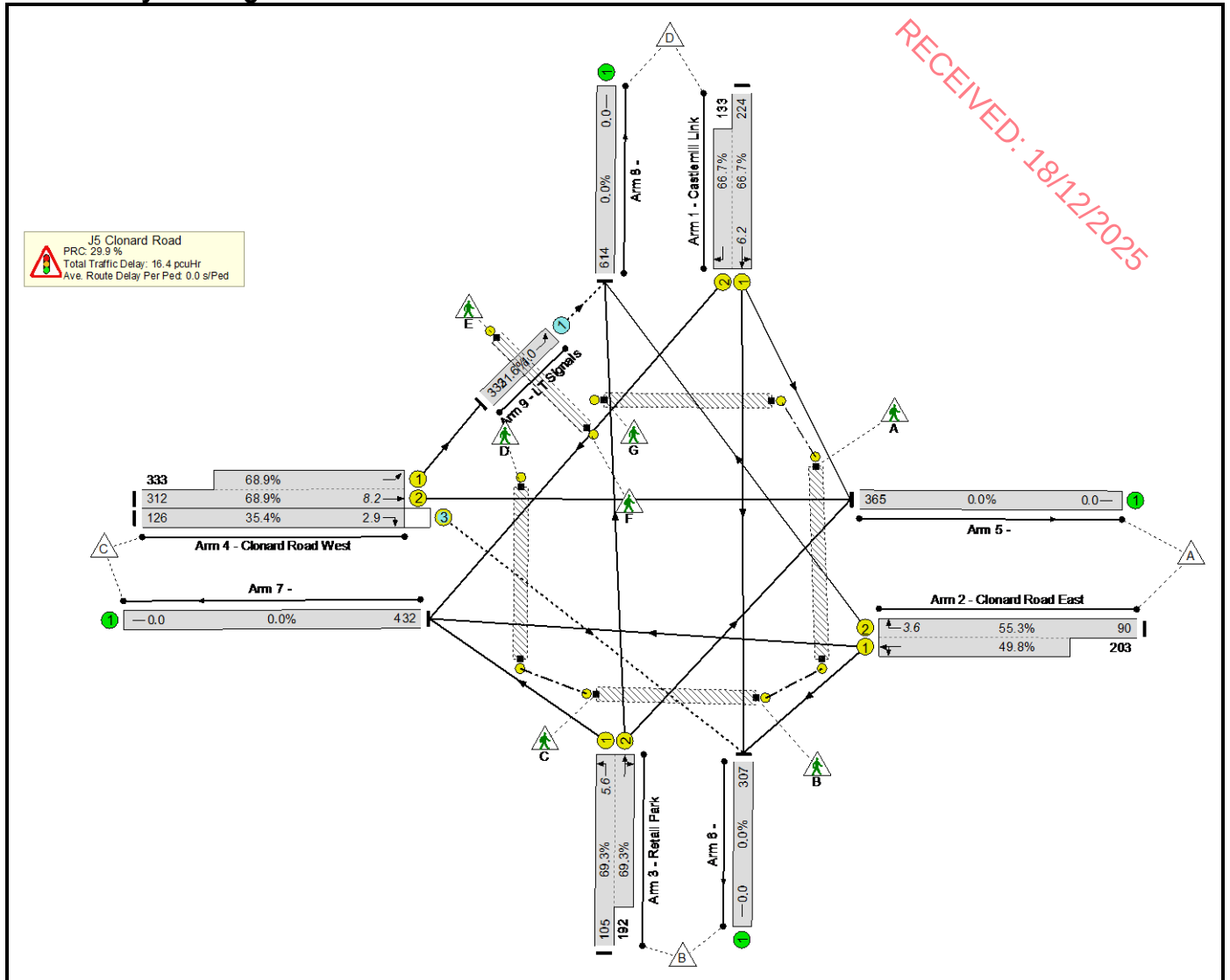
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	86.4%	65	259	4	25.1	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	86.4%	65	259	4	25.1	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	17	-	-	611	1904:1830	381+366	85.3 : 78.1%	-	-	-	8.0	47.3	9.9
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:16	-	-	380	1830:1921	56+384	86.4 : 86.4%	-	-	-	5.6	53.3	8.3
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	20:10	-	-	324	1707:2053	156+251	79.7 : 79.7%	-	-	-	5.0	55.5	6.7
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	19:69	-	-	414	1940:1853	431+230	62.6 : 62.6%	-	-	-	3.3	28.7	6.9
4/3	Clonard Road West Right	O	B	C	1	19	5	-	185	1840	264	70.1%	35	146	4	3.1	59.9	5.5
9/1	LT Signals Left	O	-		-	-	-	-	144	1853	1564	9.2%	30	114	0	0.1	1.3	0.1
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		4.2		Total Delay for Signalled Lanes (pcuHr):		25.03		Cycle Time (s):		90					
			PRC Over All Lanes (%):		4.2		Total Delay Over All Lanes(pcuHr):		25.08									

Basic Results Summary

Scenario 6: 'DN 2032' (FG6: 'YoO+5 DN (2032) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

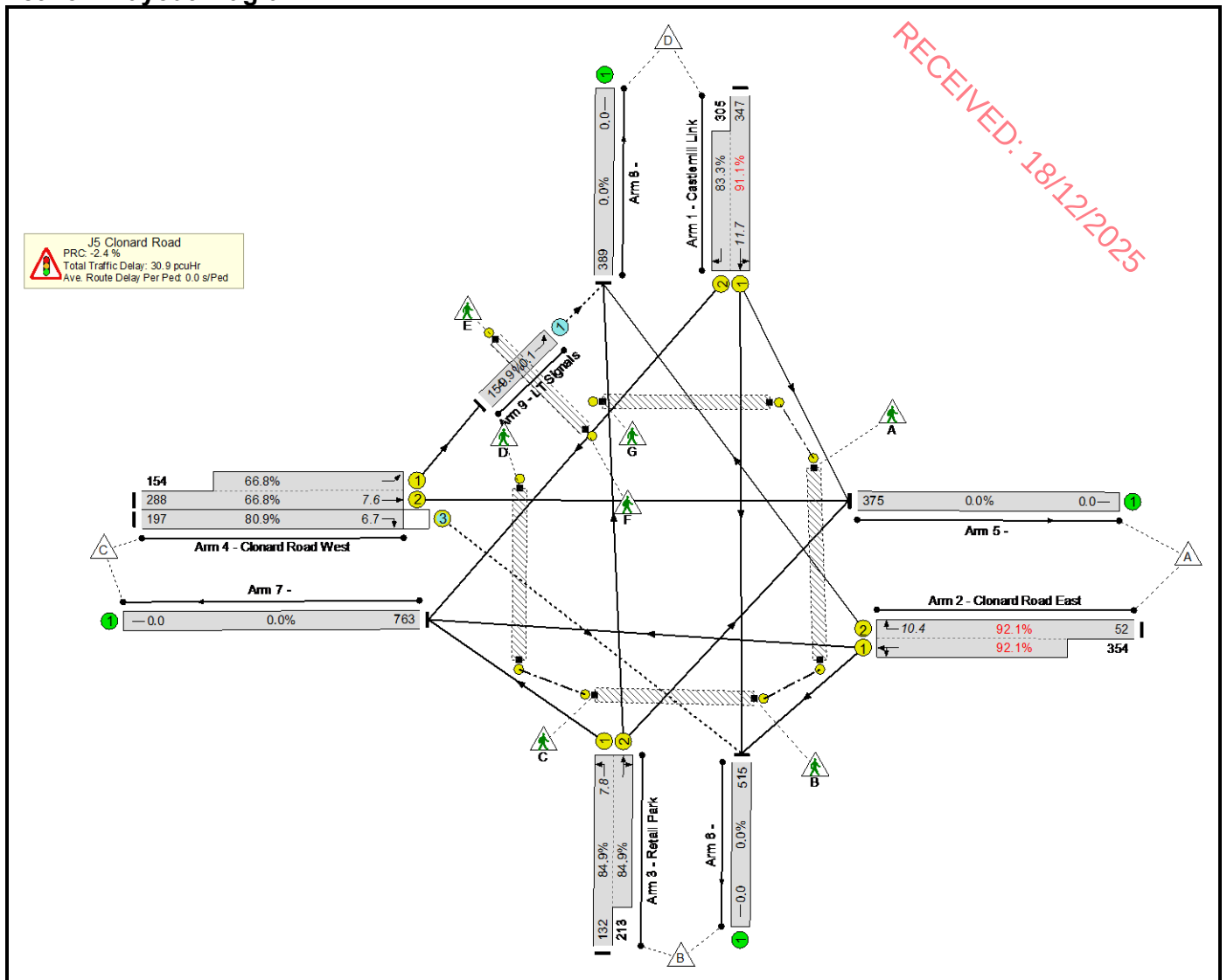
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	69.3%	186	270	3	16.4	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	69.3%	186	270	3	16.4	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	15	-	-	357	1889:1830	336+199	66.7 : 66.7%	-	-	-	4.4	43.9	6.2
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:17	-	-	293	1830:1929	163+407	55.3 : 49.8%	-	-	-	2.5	31.2	3.6
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	21:11	-	-	297	1707:2079	152+277	69.3 : 69.3%	-	-	-	3.9	47.2	5.6
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	20:69	-	-	645	1940:1853	453+483	68.9 : 68.9%	-	-	-	4.1	22.8	8.2
4/3	Clonard Road West Right	O	B	C	1	20	5	-	126	1840	355	35.4%	112	11	3	1.4	39.7	2.9
9/1	LT Signals Left	O	-		-	-	-	-	333	1853	1538	21.6%	74	259	0	0.1	1.6	1.0
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		29.9		29.9		Total Delay for Signalled Lanes (pcuHr):			16.26		Cycle Time (s):		90		
			PRC Over All Lanes (%):		29.9					Total Delay Over All Lanes(pcuHr):			16.41					

Basic Results Summary

Scenario 7: 'DN 2042' (FG7: 'YoO+15 DN (2042) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

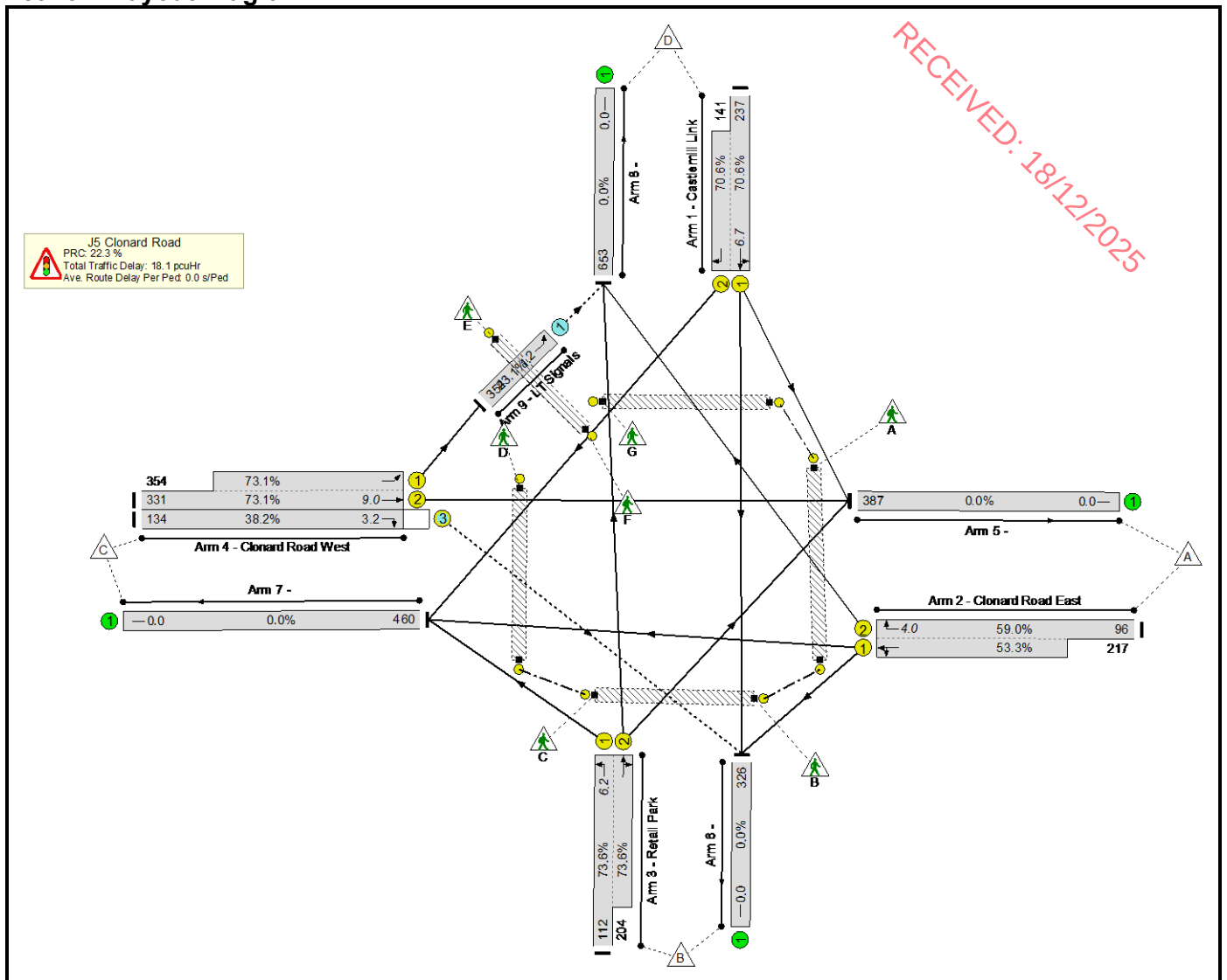
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	92.1%	51	285	15	30.9	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	92.1%	51	285	15	30.9	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	17	-	-	652	1904:1830	381+366	91.1 : 83.3%	-	-	-	9.5	52.7	11.7
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:16	-	-	406	1830:1921	56+384	92.1 : 92.1%	-	-	-	7.7	67.9	10.4
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	20:10	-	-	345	1707:2053	156+251	84.9 : 84.9%	-	-	-	5.9	61.9	7.8
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	19:69	-	-	442	1940:1853	431+231	66.8 : 66.8%	-	-	-	3.7	29.8	7.6
4/3	Clonard Road West Right	O	B	C	1	19	5	-	197	1840	244	80.9%	18	164	15	4.1	74.6	6.7
9/1	LT Signals Left	O	-		-	-	-	-	154	1853	1561	9.9%	33	121	0	0.1	1.3	0.1
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
			C1	PRC for Signalled Lanes (%):				-2.4	Total Delay for Signalled Lanes (pcuHr):				30.87	Cycle Time (s):		90		
				PRC Over All Lanes (%):				-2.4	Total Delay Over All Lanes(pcuHr):				30.93					

Basic Results Summary

Scenario 8: 'DN 2042' (FG8: 'YoO+15 DN (2042) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

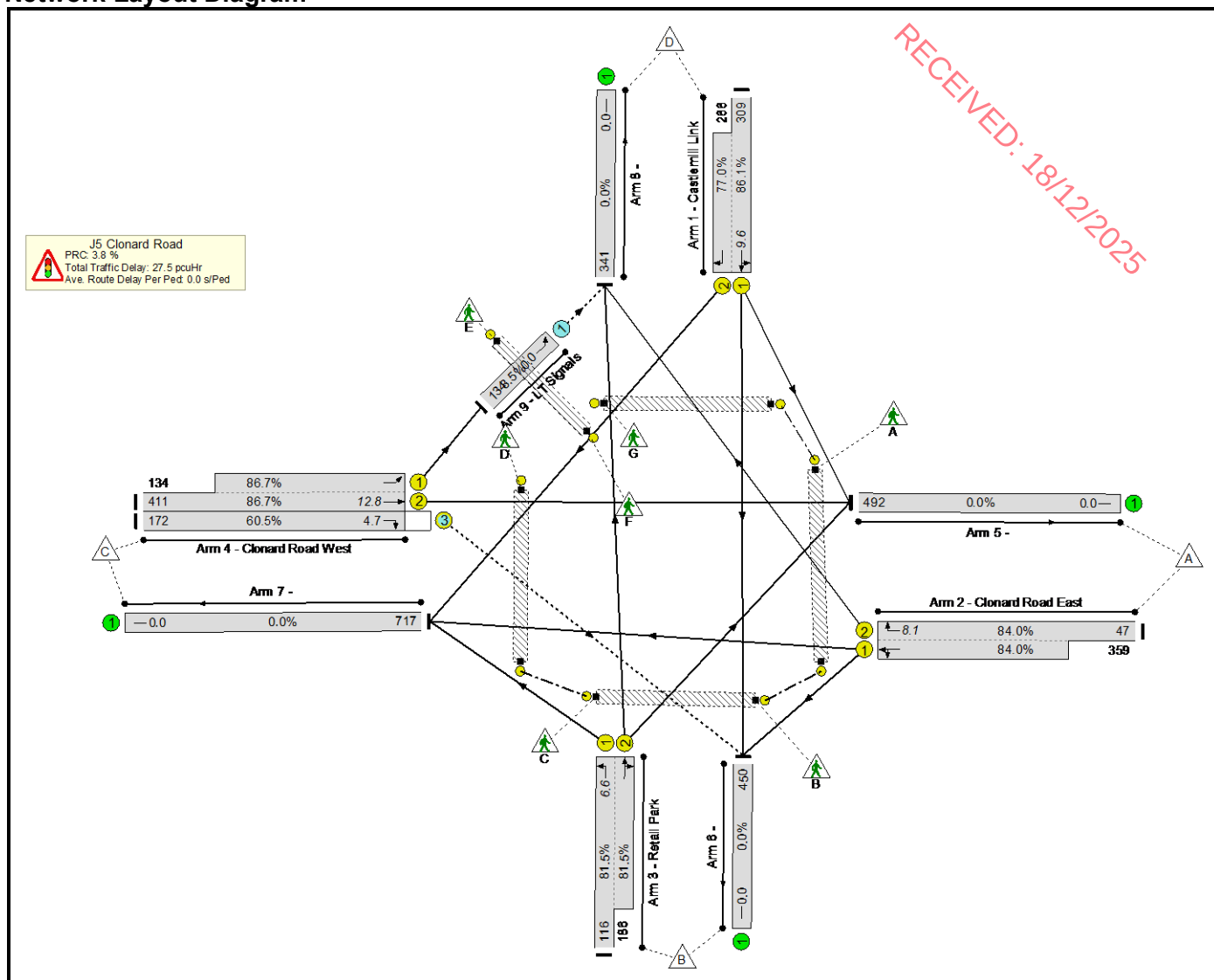
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	73.6%	186	299	3	18.1	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	73.6%	186	299	3	18.1	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	15	-	-	378	1889:1830	336+200	70.6 : 70.6%	-	-	-	4.8	45.4	6.7
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:17	-	-	313	1830:1929	163+407	59.0 : 53.3%	-	-	-	2.8	31.8	4.0
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	21:11	-	-	316	1707:2079	152+277	73.6 : 73.6%	-	-	-	4.3	49.5	6.2
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	20:69	-	-	685	1940:1853	453+484	73.1 : 73.1%	-	-	-	4.5	23.9	9.0
4/3	Clonard Road West Right	O	B	C	1	20	5	-	134	1840	350	38.2%	107	24	3	1.5	40.7	3.2
9/1	LT Signals Left	O	-		-	-	-	-	354	1853	1534	23.1%	79	275	0	0.2	1.7	1.2
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1																		
PRC for Signalled Lanes (%):					22.3		22.3		Total Delay for Signalled Lanes (pcuHr):				17.94		Cycle Time (s): 90			
PRC Over All Lanes (%):									Total Delay Over All Lanes(pcuHr):				18.10					

Basic Results Summary

Scenario 9: 'DM 2027' (FG9: 'YoO DM (2027) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

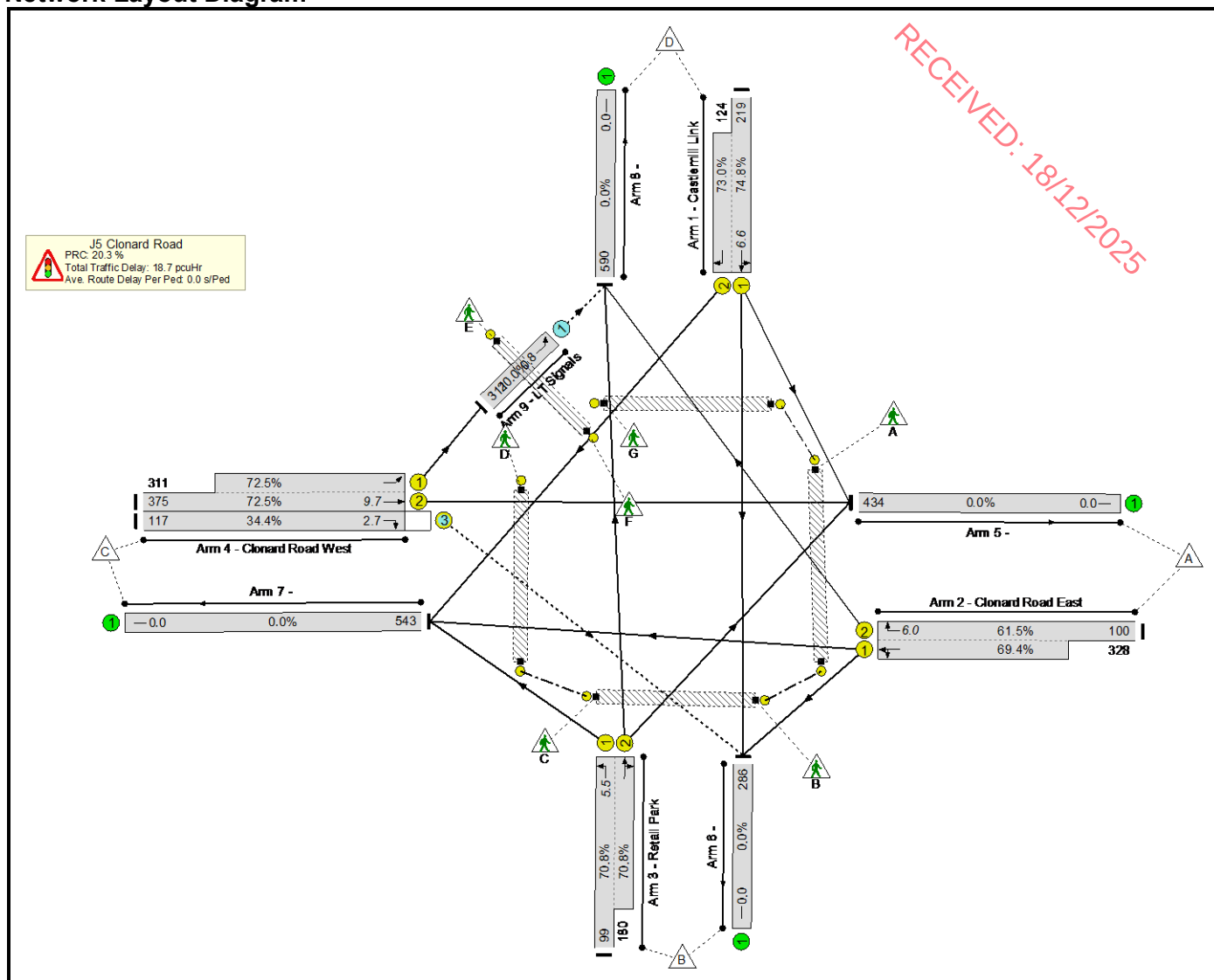
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	86.7%	72	230	4	27.5	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	86.7%	72	230	4	27.5	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	16	-	-	575	1901:1830	359+346	86.1 : 77.0%	-	-	-	7.7	48.5	9.6
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:18	-	-	406	1830:1924	56+428	84.0 : 84.0%	-	-	-	5.3	47.0	8.1
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	19:9	-	-	302	1707:2053	142+228	81.5 : 81.5%	-	-	-	5.0	60.1	6.6
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	21:69	-	-	545	1940:1853	474+155	86.7 : 86.7%	-	-	-	6.8	45.2	12.8
4/3	Clonard Road West Right	O	B	C	1	21	5	-	172	1840	284	60.5%	45	123	4	2.5	52.7	4.7
9/1	LT Signals Left	O	-		-	-	-	-	134	1853	1580	8.5%	27	107	0	0.0	1.2	0.0
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1					PRC for Signalled Lanes (%):			3.8	Total Delay for Signalled Lanes (pcuHr):				27.44	Cycle Time (s): 90				
					PRC Over All Lanes (%):			3.8	Total Delay Over All Lanes(pcuHr):				27.49					

Basic Results Summary

Scenario 10: 'DM 2027' (FG10: 'YoO DM (2027) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

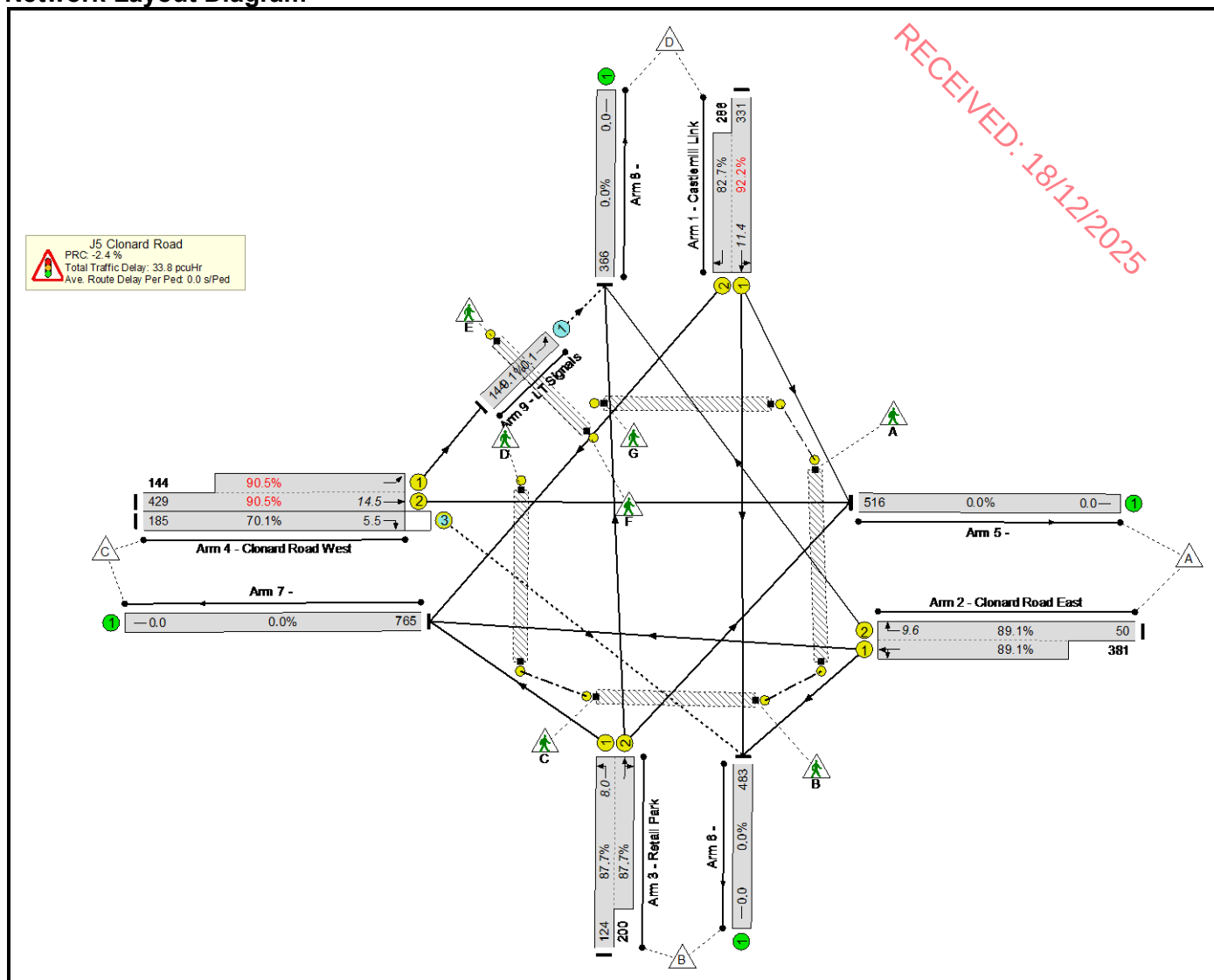
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	74.8%	162	264	3	18.7	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	74.8%	162	264	3	18.7	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	13	-	-	343	1882:1830	293+170	74.8 : 73.0%	-	-	-	4.8	50.3	6.6
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:20	-	-	428	1830:1934	163+473	61.5 : 69.4%	-	-	-	3.9	33.1	6.0
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	20:10	-	-	279	1707:2079	140+254	70.8 : 70.8%	-	-	-	3.9	49.8	5.5
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	23:69	-	-	686	1940:1853	517+429	72.5 : 72.5%	-	-	-	4.7	24.5	9.7
4/3	Clonard Road West Right	O	B	C	1	23	5	-	117	1840	340	34.4%	96	18	3	1.3	40.4	2.7
9/1	LT Signals Left	O	-		-	-	-	-	311	1853	1551	20.0%	66	245	0	0.1	1.5	0.8
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		20.3		20.3		Total Delay for Signalled Lanes (pcuHr):				18.57	Cycle Time (s):		90		
			PRC Over All Lanes (%):						Total Delay Over All Lanes(pcuHr):				18.70					

Basic Results Summary

Scenario 11: 'DM 2032' (FG11: 'YoO+5 DM (2032) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

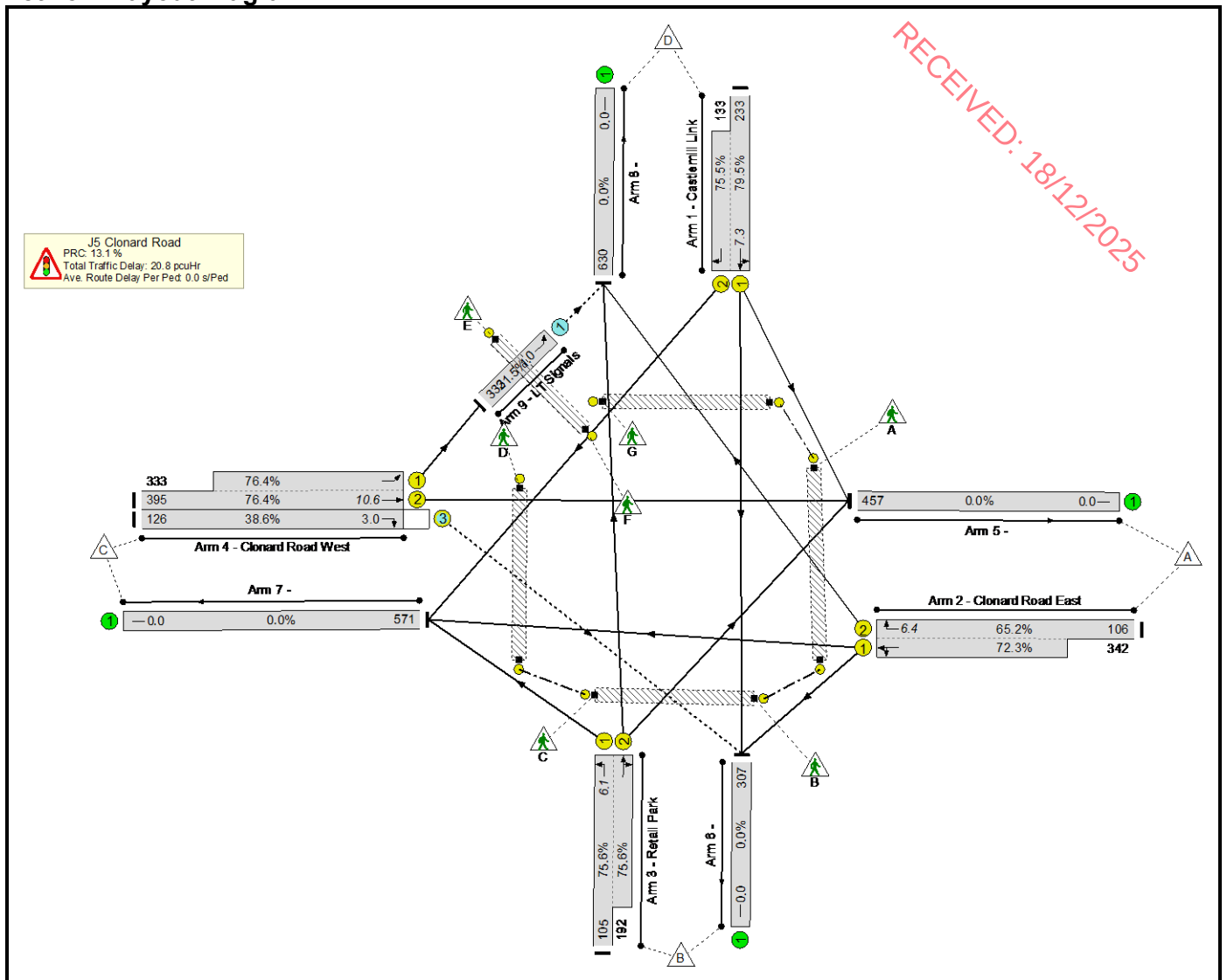
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	92.2%	58	267	4	33.8	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	92.2%	58	267	4	33.8	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	16	-	-	617	1901:1830	359+346	92.2 : 82.7%	-	-	-	9.4	54.6	11.4
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:18	-	-	431	1830:1924	56+428	89.1 : 89.1%	-	-	-	6.7	56.2	9.6
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	19:9	-	-	324	1707:2053	141+228	87.7 : 87.7%	-	-	-	6.3	70.3	8.0
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	21:69	-	-	573	1940:1853	474+159	90.5 : 90.5%	-	-	-	8.2	51.5	14.5
4/3	Clonard Road West Right	O	B	C	1	21	5	-	185	1840	264	70.1%	29	152	4	3.1	60.2	5.5
9/1	LT Signals Left	O	-		-	-	-	-	144	1853	1577	9.1%	29	115	0	0.1	1.3	0.1
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): -2.4 Total Delay for Signalled Lanes (pcuHr): 33.70 Cycle Time (s): 90 PRC Over All Lanes (%): -2.4 Total Delay Over All Lanes(pcuHr): 33.75																		

Basic Results Summary

Scenario 12: 'DM 2032' (FG12: 'YoO+5 DM (2032) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	79.5%	153	303	3	20.8	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	79.5%	153	303	3	20.8	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	13	-	-	366	1883:1830	293+176	79.5 : 75.5%	-	-	-	5.4	52.8	7.3
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:20	-	-	448	1830:1934	163+473	65.2 : 72.3%	-	-	-	4.3	34.6	6.4
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	20:10	-	-	297	1707:2079	139+254	75.6 : 75.6%	-	-	-	4.4	52.8	6.1
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	23:69	-	-	728	1940:1853	517+436	76.4 : 76.4%	-	-	-	5.2	25.6	10.6
4/3	Clonard Road West Right	O	B	C	1	23	5	-	126	1840	327	38.6%	83	40	3	1.5	42.4	3.0
9/1	LT Signals Left	O	-		-	-	-	-	333	1853	1547	21.5%	70	263	0	0.1	1.6	1.0
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		13.1		13.1		Total Delay for Signalled Lanes (pcuHr):			20.70		Cycle Time (s):		90		
			PRC Over All Lanes (%):		13.1		13.1		Total Delay Over All Lanes(pcuHr):			20.85						

Network Layout Diagram



Basic Results Summary

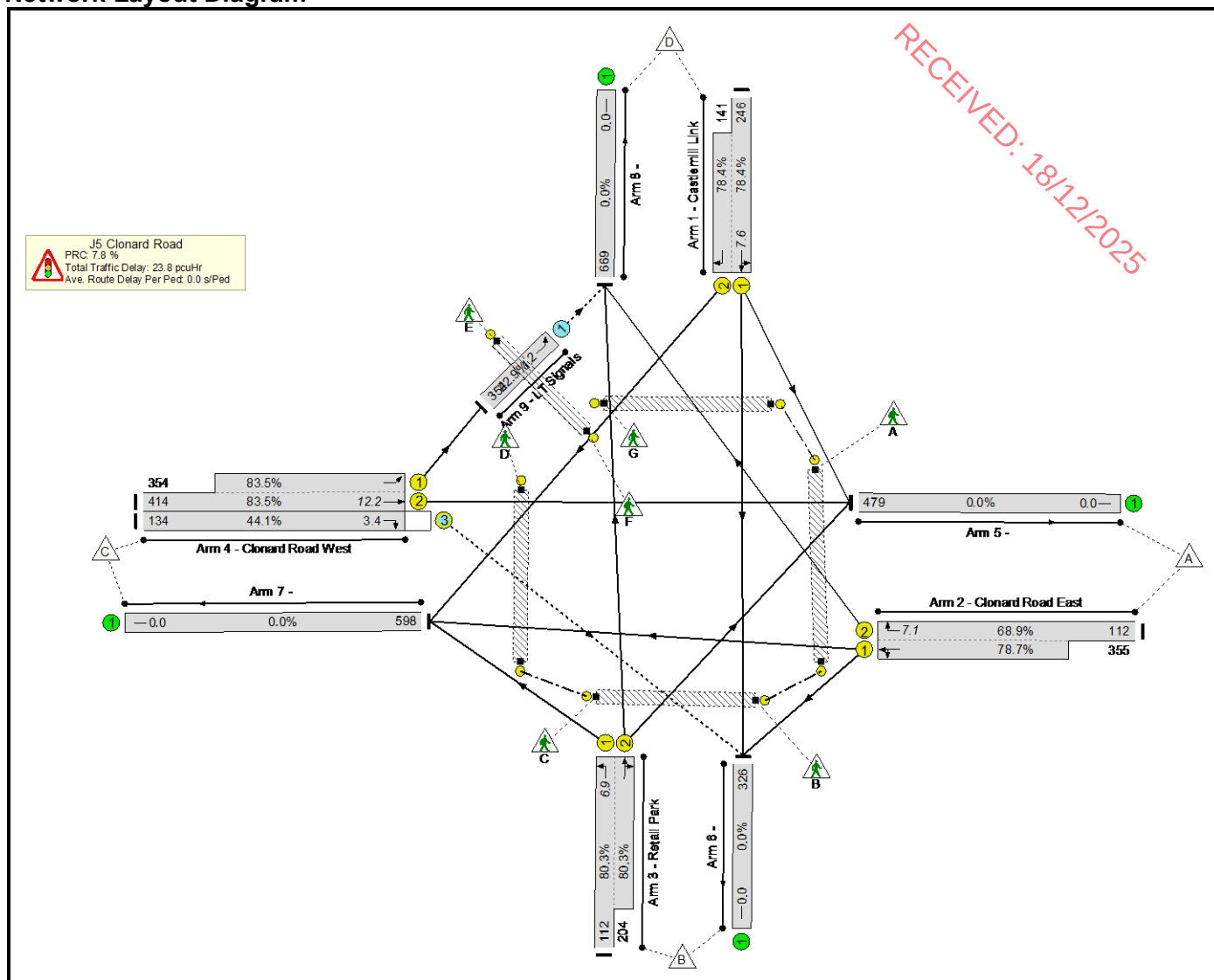
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	98.0%	43	288	22	44.4	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	98.0%	43	288	22	44.4	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	16	-	-	657	1901:1830	359+346	98.0 : 88.2%	-	-	-	12.1	66.5	14.3
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:18	-	-	456	1830:1923	56+427	94.3 : 94.3%	-	-	-	9.2	73.0	12.2
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	19:9	-	-	345	1707:2053	141+228	93.4 : 93.4%	-	-	-	8.4	88.0	10.3
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	21:69	-	-	602	1940:1853	474+164	94.3 : 94.3%	-	-	-	10.4	62.2	17.1
4/3	Clonard Road West Right	O	B	C	1	21	5	-	197	1840	244	80.9%	12	164	22	4.1	74.9	6.7
9/1	LT Signals Left	O	-		-	-	-	-	155	1853	1573	9.9%	31	124	0	0.1	1.3	0.1
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
			C1	PRC for Signalled Lanes (%):				-8.9	Total Delay for Signalled Lanes (pcuHr):				44.32	Cycle Time (s):		90		
				PRC Over All Lanes (%):				-8.9	Total Delay Over All Lanes(pcuHr):				44.37					

Basic Results Summary

Scenario 14: 'DM 2042' (FG14: 'YoO+15 DM (2042) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

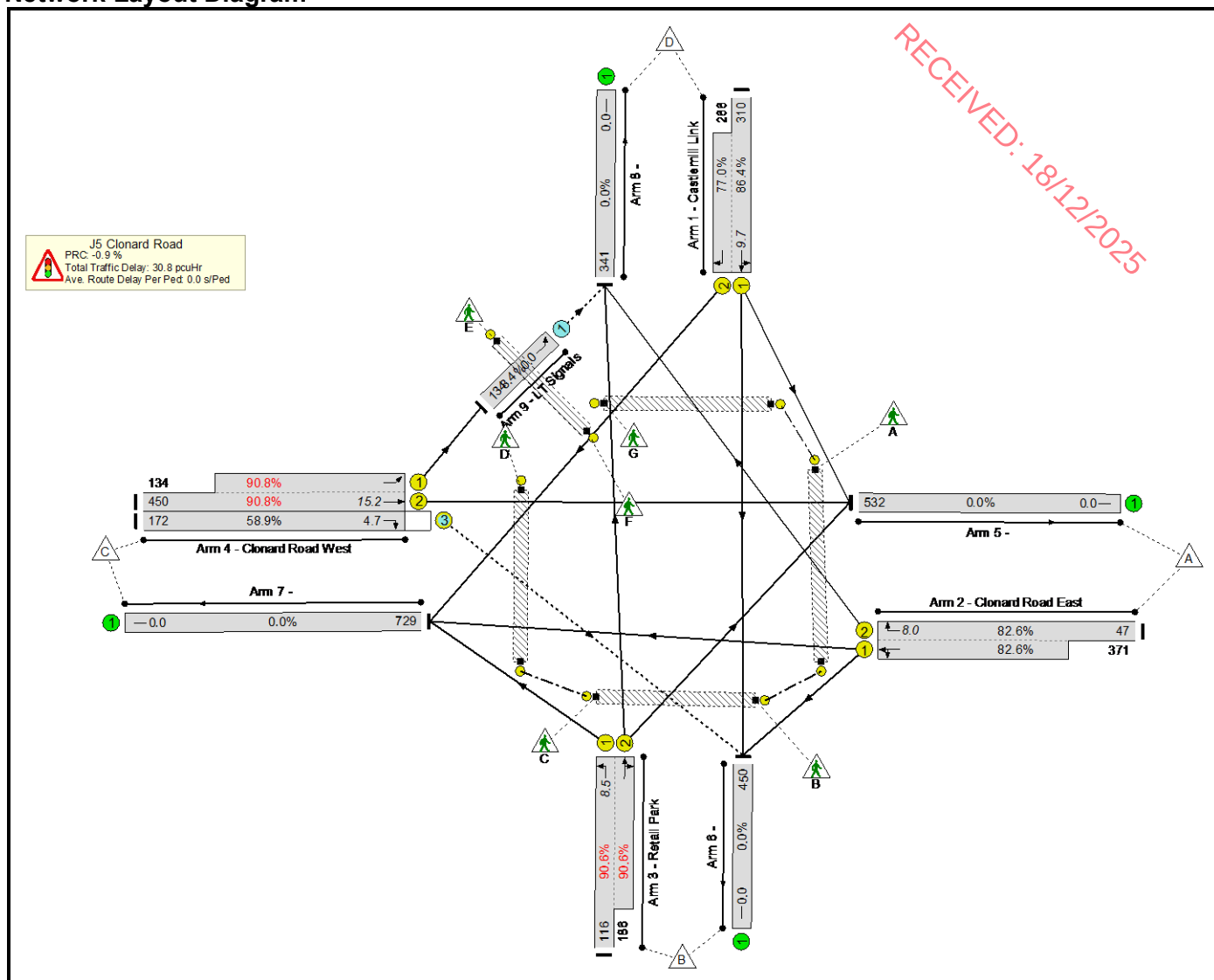


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	83.5%	134	351	3	23.8	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	83.5%	134	351	3	23.8	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	14	-	-	387	1883:1830	314+180	78.4 : 78.4%	-	-	-	5.5	51.5	7.6
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:19	-	-	467	1830:1933	163+451	68.9 : 78.7%	-	-	-	5.0	38.5	7.1
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	20:10	-	-	316	1707:2079	140+254	80.3 : 80.3%	-	-	-	5.0	57.0	6.9
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	22:69	-	-	768	1940:1853	496+424	83.5 : 83.5%	-	-	-	6.4	29.9	12.2
4/3	Clonard Road West Right	O	B	C	1	22	5	-	134	1840	304	44.1%	60	71	3	1.7	45.6	3.4
9/1	LT Signals Left	O	-		-	-	-	-	354	1853	1543	22.9%	74	280	0	0.2	1.7	1.2
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		7.8		Total Delay for Signalled Lanes (pcuHr):		23.60		Cycle Time (s):		90					
			PRC Over All Lanes (%):		7.8		Total Delay Over All Lanes(pcuHr):		23.76									

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	90.8%	74	228	4	30.8	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	90.8%	74	228	4	30.8	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	16	-	-	576	1900:1830	359+346	86.4 : 77.0%	-	-	-	7.8	48.6	9.7
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:19	-	-	418	1830:1924	57+449	82.6 : 82.6%	-	-	-	5.1	44.3	8.0
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	18:8	-	-	302	1707:2053	128+205	90.6 : 90.6%	-	-	-	6.9	82.3	8.5
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	22:69	-	-	584	1940:1853	496+148	90.8 : 90.8%	-	-	-	8.4	52.0	15.2
4/3	Clonard Road West Right	O	B	C	1	22	5	-	172	1840	292	58.9%	48	120	4	2.5	51.5	4.7
9/1	LT Signals Left	O	-		-	-	-	-	134	1853	1592	8.4%	25	109	0	0.0	1.2	0.0
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		-0.9		Total Delay for Signalled Lanes (pcuHr):		30.73		Cycle Time (s):		90					
			PRC Over All Lanes (%):		-0.9		Total Delay Over All Lanes(pcuHr):		30.77									

Network Layout Diagram



Basic Results Summary

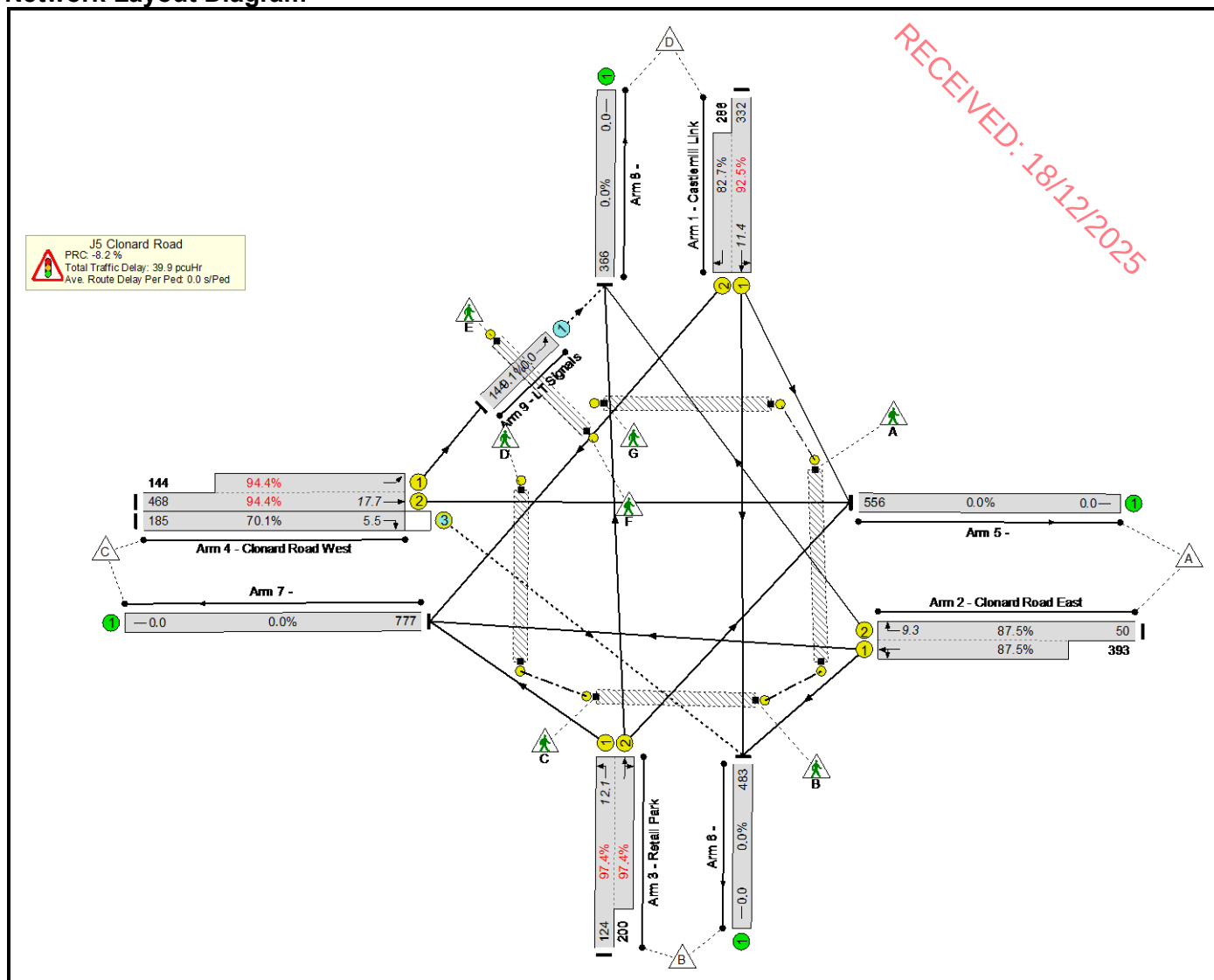
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	76.5%	135	290	3	20.2	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	76.5%	135	290	3	20.2	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	13	-	-	345	1881:1830	293+164	75.5 : 75.5%	-	-	-	4.9	51.4	6.8
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:20	-	-	466	1830:1935	161+473	64.4 : 76.5%	-	-	-	4.7	36.2	6.9
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	20:10	-	-	279	1707:2079	140+254	70.8 : 70.8%	-	-	-	3.9	49.8	5.5
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	23:69	-	-	706	1940:1853	517+407	76.4 : 76.4%	-	-	-	5.2	26.3	10.6
4/3	Clonard Road West Right	O	B	C	1	23	5	-	117	1840	313	37.4%	70	45	3	1.4	43.2	2.9
9/1	LT Signals Left	O	-		-	-	-	-	311	1853	1550	20.1%	66	245	0	0.1	1.5	0.8
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1																		

Basic Results Summary

Scenario 17: 'DS 2032' (FG17: 'YoO+5 DS (2032) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

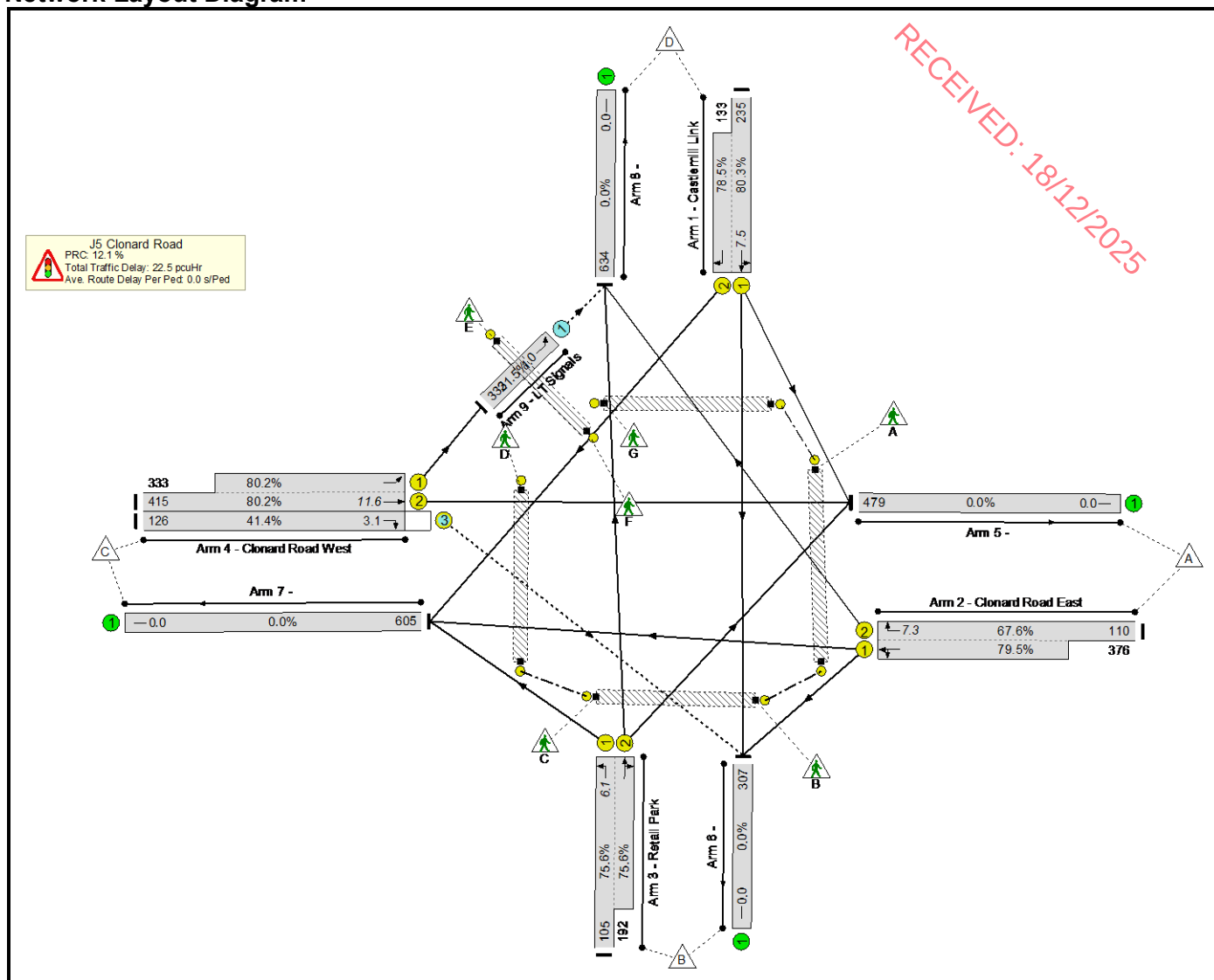


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	97.4%	61	264	4	39.9	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	97.4%	61	264	4	39.9	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	16	-	-	618	1900:1830	359+346	92.5 : 82.7%	-	-	-	9.4	54.8	11.4
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:19	-	-	443	1830:1924	57+449	87.5 : 87.5%	-	-	-	6.4	51.6	9.3
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	18:8	-	-	324	1707:2053	127+205	97.4 : 97.4%	-	-	-	10.4	115.5	12.1
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	22:69	-	-	612	1940:1853	496+153	94.4 : 94.4%	-	-	-	10.6	62.6	17.7
4/3	Clonard Road West Right	O	B	C	1	22	5	-	185	1840	264	70.1%	34	147	4	3.1	59.9	5.5
9/1	LT Signals Left	O	-		-	-	-	-	144	1853	1589	9.1%	27	117	0	0.0	1.2	0.0
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
			C1	PRC for Signalled Lanes (%):				-8.2	Total Delay for Signalled Lanes (pcuHr):				39.87	Cycle Time (s):		90		
				PRC Over All Lanes (%):				-8.2	Total Delay Over All Lanes(pcuHr):				39.92					

Network Layout Diagram



Basic Results Summary

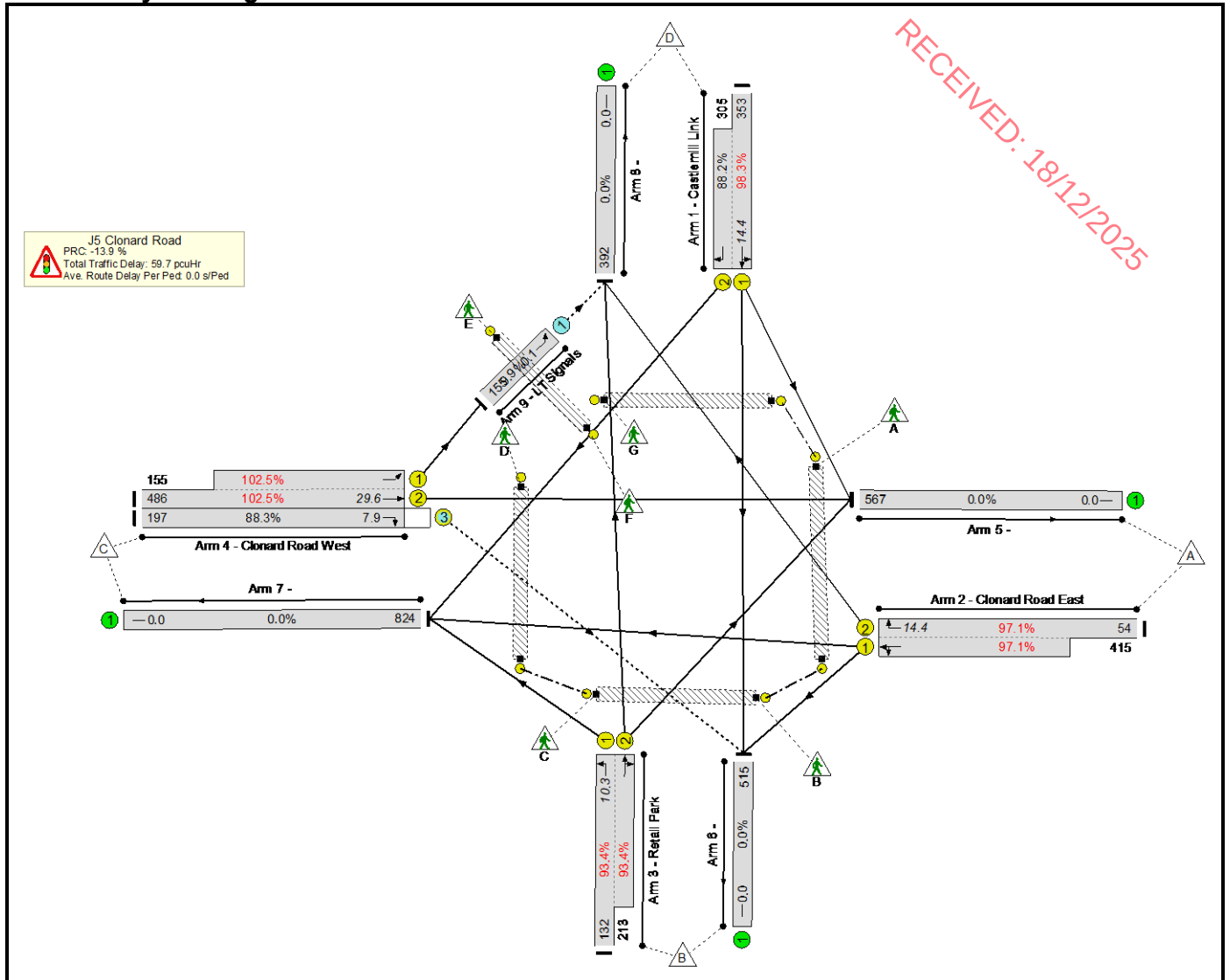
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	80.3%	131	325	3	22.5	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	80.3%	131	325	3	22.5	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	13	-	-	368	1882:1830	293+170	80.3 : 78.5%	-	-	-	5.5	54.3	7.5
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:20	-	-	486	1830:1934	163+473	67.6 : 79.5%	-	-	-	5.1	38.0	7.3
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	20:10	-	-	297	1707:2079	139+254	75.6 : 75.6%	-	-	-	4.4	52.8	6.1
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	23:69	-	-	748	1940:1853	517+415	80.2 : 80.2%	-	-	-	5.8	27.8	11.6
4/3	Clonard Road West Right	O	B	C	1	23	5	-	126	1840	304	41.4%	61	62	3	1.6	44.9	3.1
9/1	LT Signals Left	O	-		-	-	-	-	333	1853	1547	21.5%	70	263	0	0.1	1.6	1.0
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1					PRC for Signalled Lanes (%):		12.1		Total Delay for Signalled Lanes (pcuHr):				22.40		Cycle Time (s): 90			
					PRC Over All Lanes (%):		12.1		Total Delay Over All Lanes(pcuHr):				22.55					

Basic Results Summary

Scenario 19: 'DS 2042' (FG19: 'YoO+15 DS (2042) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

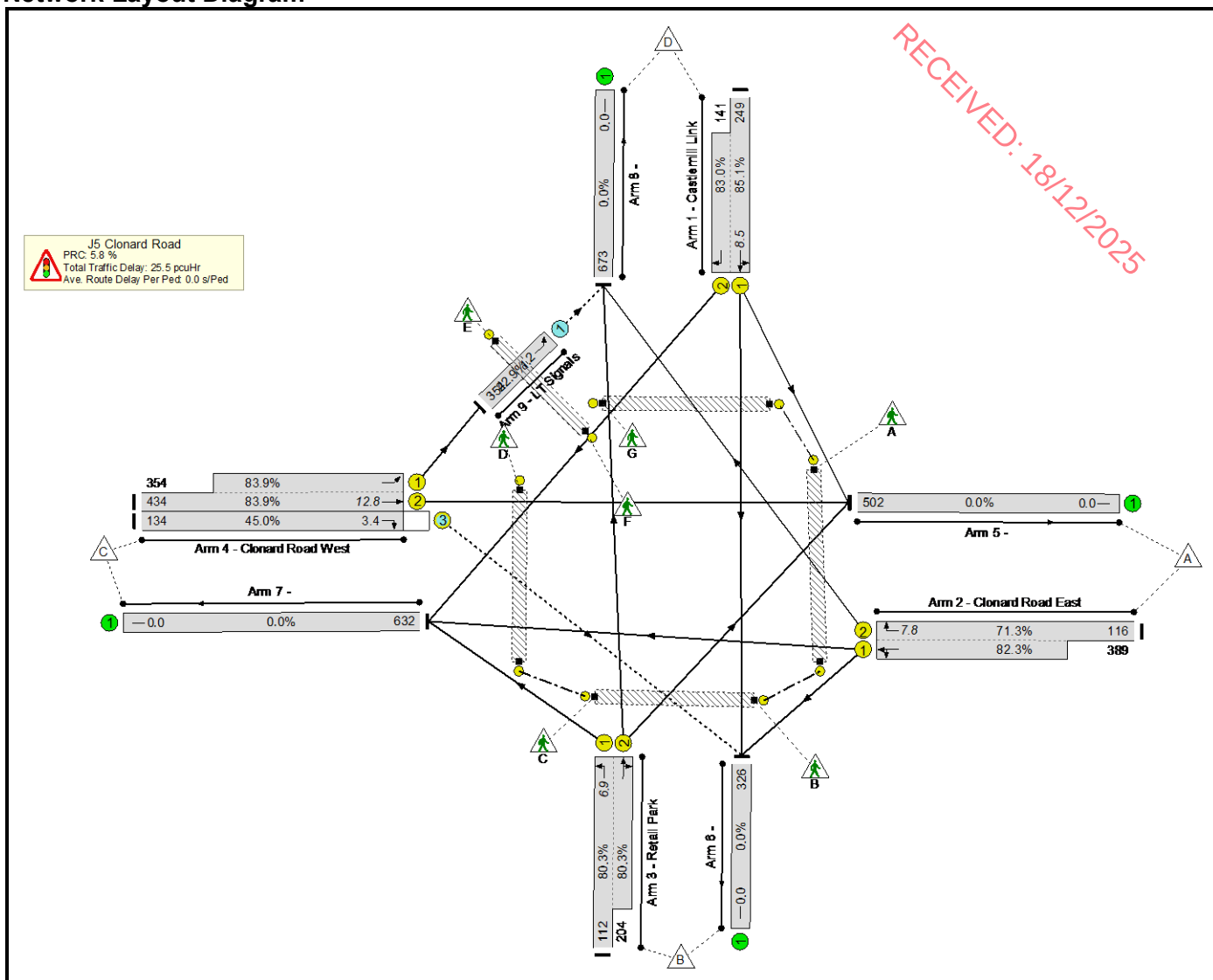


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	102.5%	37	288	27	59.7	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	102.5%	37	288	27	59.7	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	16	-	-	658	1901:1830	359+346	98.3 : 88.2%	-	-	-	12.2	67.0	14.4
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:18	-	-	469	1830:1924	56+428	97.1 : 97.1%	-	-	-	11.4	87.7	14.4
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	19:9	-	-	345	1707:2053	141+228	93.4 : 93.4%	-	-	-	8.4	88.0	10.3
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	21:69	-	-	641	1940:1853	474+151	102.5 : 102.5%	-	-	-	22.3	125.5	29.6
4/3	Clonard Road West Right	O	B	C	1	21	5	-	197	1840	223	88.3%	6	164	27	5.2	95.4	7.9
9/1	LT Signals Left	O	-		-	-	-	-	155	1853	1573	9.9%	31	124	0	0.1	1.3	0.1
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		-13.9		PRC Over All Lanes (%):		-13.9		Total Delay for Signalled Lanes (pcuHr):		59.67		Cycle Time (s):		90	
											Total Delay Over All Lanes(pcuHr):		59.72					

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	85.1%	128	357	3	25.5	-	-
J5 Clonard Road	-	-	-		-	-	-	-	-	-	-	85.1%	128	357	3	25.5	-	-
1/1+1/2	Castlemill Link Left Ahead Right	U	G		1	13	-	-	390	1882:1830	293+170	85.1 : 83.0%	-	-	-	6.4	59.4	8.5
2/2+2/1	Clonard Road East Left Ahead Right	U	D A		1:2	7:20	-	-	505	1830:1934	163+473	71.3 : 82.3%	-	-	-	5.6	40.2	7.8
3/1+3/2	Retail Park Right Left Ahead	U	E F		1	20:10	-	-	316	1707:2079	140+254	80.3 : 80.3%	-	-	-	5.0	57.0	6.9
4/2+4/1	Clonard Road West Ahead Ahead2	U	B H		1	23:69	-	-	788	1940:1853	517+422	83.9 : 83.9%	-	-	-	6.5	29.9	12.8
4/3	Clonard Road West Right	O	B	C	1	23	5	-	134	1840	298	45.0%	54	77	3	1.7	46.4	3.4
9/1	LT Signals Left	O	-		-	-	-	-	354	1853	1543	22.9%	74	280	0	0.2	1.7	1.2
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P4	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P5	Unnamed Ped Link	-			0	0	-	-	0	-	72000	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		5.8		Total Delay for Signalled Lanes (pcuHr):		25.34		Cycle Time (s):		90					
			PRC Over All Lanes (%):		5.8		Total Delay Over All Lanes(pcuHr):		25.51									

J5 - R122/ Westbrook Park/ Tesco Access Roundabout Modelling Report

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Junctions 9									
ARCADY 9 - Roundabout Module									
Version: 9.5.1.7462 © Copyright TRL Limited, 2019									
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk									
The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution									

Filename: Site 5_v2.j9

Path: C:\Users\Akshai\Transport Insights\TI - Projects 2025\C1266 2025 Glenveagh Flemington Lane Balbriggan LRD\Modelling and Analysis\Modelling\ARCADY\Site 5 Tesco Rbt

Report generation date: 21/08/2025 11:28:55

»Base 2025, AM
»Base 2025, PM
»DN 2027, AM
»DN 2027, PM
»DN 2032, AM
»DN 2032, PM
»DN 2042, AM
»DN 2042, PM
»DM 2027, AM
»DM 2027, PM
»DM 2032, AM
»DM 2032, PM
»DM 2042, AM
»DM 2042, PM
»DS 2027, AM
»DS 2027, PM
»DS 2032, AM
»DS 2032, PM
»DS 2042, AM
»DS 2042, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Base 2025									
A - Chapel Street	D1	0.6	4.84	0.36	A	D2	0.4	4.18	0.27	A
B - Tesco Access		0.2	4.99	0.18	A		0.5	5.28	0.32	A
C - Clonard Road		0.5	4.79	0.31	A		0.5	5.22	0.35	A
D - Westbrook Park		0.1	4.60	0.09	A		0.0	4.66	0.05	A
	DN 2027									
A - Chapel Street	D3	0.6	4.95	0.37	A	D4	0.4	4.24	0.28	A
B - Tesco Access		0.3	5.08	0.19	A		0.5	5.41	0.33	A
C - Clonard Road		0.5	4.89	0.32	A		0.6	5.36	0.36	A
D - Westbrook Park		0.1	4.69	0.09	A		0.1	4.73	0.05	A
	DN 2032									
A - Chapel Street		0.7	5.17	0.40	A		0.4	4.37	0.30	A

B - Tesco Access	D5	0.3	5.27	0.20	A	D6	0.6	5.70	0.36	A
C - Clonard Road		0.5	5.09	0.34	A		0.6	5.65	0.39	A
D - Westbrook Park		0.1	4.81	0.10	A		0.1	4.87	0.05	A
	DN 2042									
A - Chapel Street	D7	0.8	5.44	0.43	A	D8	0.5	4.52	0.32	A
B - Tesco Access		0.3	5.50	0.22	A		0.6	6.01	0.38	A
C - Clonard Road		0.6	5.35	0.37	A		0.7	5.97	0.42	A
D - Westbrook Park		0.1	4.95	0.11	A		0.1	5.01	0.06	A
	DM 2027									
A - Chapel Street	D9	0.7	5.31	0.41	A	D10	0.7	4.99	0.40	A
B - Tesco Access		0.3	5.26	0.20	A		0.6	6.27	0.38	A
C - Clonard Road		0.9	6.33	0.48	A		0.8	6.29	0.45	A
D - Westbrook Park		0.1	5.27	0.10	A		0.1	5.12	0.07	A
	DM 2032									
A - Chapel Street	D11	0.8	5.60	0.44	A	D12	0.7	5.16	0.42	A
B - Tesco Access		0.3	5.49	0.22	A		0.7	6.66	0.41	A
C - Clonard Road		1.0	6.68	0.50	A		0.9	6.70	0.48	A
D - Westbrook Park		0.1	5.43	0.11	A		0.1	5.28	0.07	A
	DM 2042									
A - Chapel Street	D13	0.9	5.87	0.47	A	D14	0.8	5.37	0.43	A
B - Tesco Access		0.3	5.72	0.23	A		0.8	7.07	0.44	A
C - Clonard Road		1.1	7.06	0.53	A		1.0	7.15	0.51	A
D - Westbrook Park		0.1	5.60	0.12	A		0.1	5.45	0.08	A
	DS 2027									
A - Chapel Street	D15	0.8	5.41	0.42	A	D16	0.7	5.22	0.42	A
B - Tesco Access		0.3	5.31	0.20	A		0.7	6.53	0.39	A
C - Clonard Road		1.1	6.85	0.52	A		0.9	6.57	0.48	A
D - Westbrook Park		0.1	5.43	0.11	A		0.1	5.22	0.07	A
	DS 2032									
A - Chapel Street	D17	0.8	5.68	0.45	A	D18	0.8	5.41	0.44	A
B - Tesco Access		0.3	5.55	0.22	A		0.8	6.95	0.42	A
C - Clonard Road		1.2	7.25	0.54	A		1.0	7.02	0.51	A
D - Westbrook Park		0.1	5.60	0.12	A		0.1	5.39	0.08	A
	DS 2042									
A - Chapel Street	D19	0.9	6.00	0.48	A	D20	0.9	5.60	0.46	A
B - Tesco Access		0.3	5.78	0.24	A		0.9	7.40	0.45	A
C - Clonard Road		1.3	7.71	0.57	A		1.1	7.52	0.54	A
D - Westbrook Park		0.1	5.78	0.13	A		0.1	5.57	0.08	A

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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	C1266 2025 Glenveagh Flemington Lane Balbriggan LRD
Location	R122 Clonard Road/ Westbrook Park Tesco Access Roundabout
Site number	5
Date	16/07/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureADIAkshai
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	Base 2025	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base 2025	PM	ONE HOUR	16:30	18:00	15	✓
D3	DN 2027	AM	ONE HOUR	07:45	09:15	15	✓
D4	DN 2027	PM	ONE HOUR	16:30	18:00	15	✓
D5	DN 2032	AM	ONE HOUR	07:45	09:15	15	✓
D6	DN 2032	PM	ONE HOUR	16:30	18:00	15	✓
D7	DN 2042	AM	ONE HOUR	07:45	09:15	15	✓
D8	DN 2042	PM	ONE HOUR	16:30	18:00	15	✓
D9	DM 2027	AM	ONE HOUR	07:45	09:15	15	✓
D10	DM 2027	PM	ONE HOUR	16:30	18:00	15	✓
D11	DM 2032	AM	ONE HOUR	07:45	09:15	15	✓
D12	DM 2032	PM	ONE HOUR	16:30	18:00	15	✓
D13	DM 2042	AM	ONE HOUR	07:45	09:15	15	✓
D14	DM 2042	PM	ONE HOUR	16:30	18:00	15	✓
D15	DS 2027	AM	ONE HOUR	07:45	09:15	15	✓
D16	DS 2027	PM	ONE HOUR	16:30	18:00	15	✓
D17	DS 2032	AM	ONE HOUR	07:45	09:15	15	✓
D18	DS 2032	PM	ONE HOUR	16:30	18:00	15	✓
D19	DS 2042	AM	ONE HOUR	07:45	09:15	15	✓
D20	DS 2042	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

Base 2025, AM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.36	4.84	0.6	A	363	544
B - Tesco Access	0.18	4.99	0.2	A	144	216
C - Clonard Road	0.31	4.79	0.5	A	288	432
D - Westbrook Park	0.09	4.60	0.1	A	63	95

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	298	74	59	45.17	1238	0.240	296	272	0.0	0.3	3.987	A
B - Tesco Access	118	30	218		1029	0.115	118	137	0.0	0.1	4.396	A
C - Clonard Road	236	59	72		1143	0.207	235	264	0.0	0.3	4.107	A
D - Westbrook Park	52	13	279		937	0.055	52	28	0.0	0.1	4.143	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	355	89	71	53.94	1228	0.290	355	325	0.3	0.4	4.310	A
B - Tesco Access	141	35	262		1007	0.140	141	164	0.1	0.2	4.632	A
C - Clonard Road	282	71	86		1135	0.249	282	316	0.3	0.3	4.375	A
D - Westbrook Park	62	15	335		910	0.068	62	34	0.1	0.1	4.327	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	435	109	87	66.06	1211	0.359	435	398	0.4	0.6	4.842	A
B - Tesco Access	173	43	320		976	0.177	173	201	0.2	0.2	4.988	A
C - Clonard Road	346	86	106		1125	0.307	345	387	0.3	0.5	4.787	A
D - Westbrook Park	76	19	410		873	0.087	76	41	0.1	0.1	4.603	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	435	109	87	66.06	1214	0.358	435	399	0.6	0.6	4.829	A
B - Tesco Access	173	43	321		976	0.177	173	201	0.2	0.2	4.992	A
C - Clonard Road	346	86	106		1125	0.307	346	388	0.5	0.5	4.793	A
D - Westbrook Park	76	19	410		873	0.087	76	41	0.1	0.1	4.605	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	355	89	71	53.94	1232	0.288	356	326	0.6	0.4	4.297	A
B - Tesco Access	141	35	262		1007	0.140	141	165	0.2	0.2	4.638	A
C - Clonard Road	282	71	86		1135	0.249	283	317	0.5	0.3	4.382	A
D - Westbrook Park	62	15	335		909	0.068	62	34	0.1	0.1	4.330	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	298	74	60	45.17	1246	0.239	298	273	0.4	0.3	3.973	A
B - Tesco Access	118	30	220		1029	0.115	118	138	0.2	0.1	4.405	A
C - Clonard Road	236	59	72		1143	0.207	237	266	0.3	0.3	4.122	A
D - Westbrook Park	52	13	281		936	0.055	52	28	0.1	0.1	4.151	A

Base 2025, PM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.27	4.18	0.4	A	278	416
B - Tesco Access	0.32	5.28	0.5	A	276	413
C - Clonard Road	0.35	5.22	0.5	A	304	456
D - Westbrook Park	0.05	4.66	0.0	A	31	46

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	228	57	46	45.17	1244	0.183	227	347	0.0	0.2	3.622	A
B - Tesco Access	226	57	136		1072	0.211	225	136	0.0	0.3	4.413	A
C - Clonard Road	249	62	159		1095	0.228	248	203	0.0	0.3	4.243	A
D - Westbrook Park	25	6	367		894	0.028	25	40	0.0	0.0	4.144	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	272	68	55	53.94	1232	0.221	272	415	0.2	0.3	3.841	A
B - Tesco Access	270	68	163		1058	0.255	270	163	0.3	0.4	4.745	A
C - Clonard Road	298	74	190		1078	0.276	298	243	0.3	0.4	4.610	A
D - Westbrook Park	30	8	440		858	0.035	30	48	0.0	0.0	4.348	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	333	83	67	66.06	1214	0.274	333	509	0.3	0.4	4.181	A
B - Tesco Access	331	83	200		1039	0.318	330	199	0.4	0.5	5.277	A
C - Clonard Road	365	91	233		1055	0.346	364	298	0.4	0.5	5.210	A
D - Westbrook Park	37	9	538		810	0.046	37	58	0.0	0.0	4.659	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	333	83	67	66.06	1216	0.274	333	509	0.4	0.4	4.175	A
B - Tesco Access	331	83	200		1039	0.318	331	200	0.5	0.5	5.284	A
C - Clonard Road	365	91	233		1054	0.346	365	298	0.5	0.5	5.220	A
D - Westbrook Park	37	9	539		809	0.046	37	59	0.0	0.0	4.661	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	272	68	55	53.94	1235	0.220	272	417	0.4	0.3	3.832	A
B - Tesco Access	270	68	164		1058	0.255	271	163	0.5	0.4	4.756	A
C - Clonard Road	298	74	191		1078	0.276	298	244	0.5	0.4	4.622	A
D - Westbrook Park	30	8	441		857	0.035	30	48	0.0	0.0	4.353	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	228	57	46	45.17	1249	0.182	228	349	0.3	0.2	3.612	A
B - Tesco Access	226	57	137		1072	0.211	226	137	0.4	0.3	4.430	A
C - Clonard Road	249	62	160		1095	0.228	250	204	0.4	0.3	4.263	A
D - Westbrook Park	25	6	369		893	0.028	25	40	0.0	0.0	4.151	A

DN 2027, AM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.37	4.95	0.6	A	376	565
B - Tesco Access	0.19	5.08	0.3	A	150	225
C - Clonard Road	0.32	4.89	0.5	A	299	448
D - Westbrook Park	0.09	4.69	0.1	A	66	98

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	309	77	61	45.17	1238	0.250	307	282	0.0	0.3	4.039	A
B - Tesco Access	123	31	227		1025	0.120	122	142	0.0	0.2	4.440	A
C - Clonard Road	245	61	75		1142	0.215	244	274	0.0	0.3	4.155	A
D - Westbrook Park	54	13	290		932	0.058	54	29	0.0	0.1	4.196	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	369	92	74	53.94	1227	0.301	368	338	0.3	0.4	4.380	A
B - Tesco Access	147	37	272		1002	0.146	147	170	0.2	0.2	4.691	A
C - Clonard Road	293	73	90		1133	0.258	293	328	0.3	0.4	4.440	A
D - Westbrook Park	64	16	347		904	0.071	64	35	0.1	0.1	4.392	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	452	113	90	66.06	1211	0.373	451	414	0.4	0.6	4.950	A
B - Tesco Access	180	45	332		970	0.185	179	209	0.2	0.3	5.072	A
C - Clonard Road	359	90	110		1122	0.320	358	402	0.4	0.5	4.883	A
D - Westbrook Park	79	20	425		865	0.091	79	43	0.1	0.1	4.686	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	452	113	90	66.06	1214	0.372	452	414	0.6	0.6	4.934	A
B - Tesco Access	180	45	333		970	0.185	180	209	0.3	0.3	5.076	A
C - Clonard Road	359	90	110		1122	0.320	359	403	0.5	0.5	4.890	A
D - Westbrook Park	79	20	426		865	0.091	79	43	0.1	0.1	4.688	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	369	92	74	53.94	1232	0.299	369	339	0.6	0.4	4.366	A
B - Tesco Access	147	37	272		1001	0.147	147	171	0.3	0.2	4.695	A
C - Clonard Road	293	73	90		1133	0.258	293	329	0.5	0.4	4.449	A
D - Westbrook Park	64	16	348		903	0.071	64	35	0.1	0.1	4.397	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	309	77	62	45.17	1245	0.248	309	284	0.4	0.3	4.021	A
B - Tesco Access	123	31	228		1024	0.120	123	143	0.2	0.2	4.452	A
C - Clonard Road	245	61	75		1141	0.215	246	276	0.4	0.3	4.169	A
D - Westbrook Park	54	13	292		931	0.058	54	29	0.1	0.1	4.204	A

DN 2027, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.28	4.24	0.4	A	288	432
B - Tesco Access	0.33	5.41	0.5	A	286	429
C - Clonard Road	0.36	5.36	0.6	A	315	473
D - Westbrook Park	0.05	4.73	0.1	A	32	48

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	236	59	47	45.17	1243	0.190	235	359	0.0	0.2	3.655	A
B - Tesco Access	235	59	142		1069	0.219	234	141	0.0	0.3	4.470	A
C - Clonard Road	259	65	164		1092	0.237	257	211	0.0	0.3	4.306	A
D - Westbrook Park	26	7	380		887	0.030	26	41	0.0	0.0	4.180	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	282	71	57	53.94	1231	0.229	282	431	0.2	0.3	3.884	A
B - Tesco Access	280	70	170		1055	0.266	280	169	0.3	0.4	4.827	A
C - Clonard Road	309	77	197		1074	0.287	308	252	0.3	0.4	4.698	A
D - Westbrook Park	31	8	456		850	0.037	31	50	0.0	0.0	4.396	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	345	86	69	66.06	1214	0.285	345	527	0.3	0.4	4.243	A
B - Tesco Access	343	86	208		1035	0.332	343	207	0.4	0.5	5.400	A
C - Clonard Road	378	95	241		1050	0.360	377	309	0.4	0.6	5.350	A
D - Westbrook Park	38	10	558		800	0.048	38	61	0.0	0.1	4.726	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	345	86	69	66.06	1216	0.284	345	528	0.4	0.4	4.236	A
B - Tesco Access	343	86	208		1035	0.332	343	207	0.5	0.5	5.409	A
C - Clonard Road	378	95	242		1050	0.360	378	309	0.6	0.6	5.360	A
D - Westbrook Park	38	10	559		799	0.048	38	61	0.1	0.1	4.729	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	282	71	57	53.94	1234	0.228	282	432	0.4	0.3	3.877	A
B - Tesco Access	280	70	170		1055	0.266	281	169	0.5	0.4	4.840	A
C - Clonard Road	309	77	198		1074	0.287	309	253	0.6	0.4	4.712	A
D - Westbrook Park	31	8	457		849	0.037	31	50	0.1	0.0	4.402	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	236	59	47	45.17	1249	0.189	236	362	0.3	0.2	3.646	A
B - Tesco Access	235	59	142		1069	0.220	235	142	0.4	0.3	4.490	A
C - Clonard Road	259	65	165		1092	0.237	259	212	0.4	0.3	4.326	A
D - Westbrook Park	26	7	383		886	0.030	26	42	0.0	0.0	4.186	A

DN 2032, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.40	5.17	0.7	A	403	605
B - Tesco Access	0.20	5.27	0.3	A	161	242
C - Clonard Road	0.34	5.09	0.5	A	320	480
D - Westbrook Park	0.10	4.81	0.1	A	70	105

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	331	83	65	45.17	1236	0.268	329	302	0.0	0.4	4.143	A
B - Tesco Access	132	33	243		1017	0.130	131	152	0.0	0.2	4.545	A
C - Clonard Road	263	66	81		1138	0.231	261	294	0.0	0.3	4.252	A
D - Westbrook Park	58	14	311		922	0.062	57	31	0.0	0.1	4.264	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	395	99	78	53.94	1226	0.322	394	362	0.4	0.5	4.524	A
B - Tesco Access	158	39	291		992	0.159	158	182	0.2	0.2	4.825	A
C - Clonard Road	313	78	97		1130	0.278	313	352	0.3	0.4	4.572	A
D - Westbrook Park	69	17	372		891	0.077	69	37	0.1	0.1	4.481	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	484	121	96	66.06	1210	0.400	483	444	0.5	0.7	5.169	A
B - Tesco Access	193	48	356		958	0.202	193	223	0.2	0.3	5.263	A
C - Clonard Road	384	96	118		1118	0.344	383	431	0.4	0.5	5.079	A
D - Westbrook Park	84	21	456		850	0.099	84	46	0.1	0.1	4.811	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	484	121	96	66.06	1214	0.398	484	444	0.7	0.7	5.150	A
B - Tesco Access	193	48	357		958	0.202	193	223	0.3	0.3	5.267	A
C - Clonard Road	384	96	118		1118	0.344	384	431	0.5	0.5	5.090	A
D - Westbrook Park	84	21	456		850	0.099	84	46	0.1	0.1	4.813	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	395	99	79	53.94	1232	0.321	396	363	0.7	0.5	4.503	A
B - Tesco Access	158	39	292		991	0.159	158	183	0.3	0.2	4.835	A
C - Clonard Road	313	78	97		1129	0.278	314	353	0.5	0.4	4.585	A
D - Westbrook Park	69	17	373		891	0.077	69	38	0.1	0.1	4.485	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	331	83	66	45.17	1244	0.266	331	304	0.5	0.4	4.122	A
B - Tesco Access	132	33	244		1016	0.130	132	153	0.2	0.2	4.556	A
C - Clonard Road	263	66	81		1138	0.231	263	295	0.4	0.3	4.270	A
D - Westbrook Park	58	14	312		921	0.062	58	31	0.1	0.1	4.273	A

DN 2032, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.30	4.37	0.4	A	308	462
B - Tesco Access	0.36	5.70	0.6	A	306	459
C - Clonard Road	0.39	5.65	0.6	A	337	505
D - Westbrook Park	0.05	4.87	0.1	A	34	51

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	253	63	50	45.17	1242	0.203	252	384	0.0	0.3	3.720	A
B - Tesco Access	251	63	151		1064	0.236	250	151	0.0	0.3	4.609	A
C - Clonard Road	276	69	176		1086	0.254	275	226	0.0	0.3	4.431	A
D - Westbrook Park	28	7	407		874	0.032	28	44	0.0	0.0	4.253	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	302	75	60	53.94	1230	0.245	301	460	0.3	0.3	3.970	A
B - Tesco Access	300	75	181		1049	0.286	300	180	0.3	0.4	5.024	A
C - Clonard Road	330	82	211		1067	0.309	329	270	0.3	0.4	4.881	A
D - Westbrook Park	33	8	487		835	0.040	33	53	0.0	0.0	4.492	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	369	92	74	66.06	1213	0.305	369	563	0.3	0.4	4.369	A
B - Tesco Access	367	92	222		1027	0.358	367	221	0.4	0.6	5.691	A
C - Clonard Road	404	101	258		1041	0.388	403	331	0.4	0.6	5.643	A
D - Westbrook Park	41	10	596		781	0.052	41	65	0.0	0.1	4.863	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	369	92	74	66.06	1215	0.304	369	564	0.4	0.4	4.360	A
B - Tesco Access	367	92	222		1027	0.358	367	221	0.6	0.6	5.703	A
C - Clonard Road	404	101	259		1040	0.388	404	331	0.6	0.6	5.655	A
D - Westbrook Park	41	10	598		781	0.052	41	65	0.1	0.1	4.867	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	302	75	61	53.94	1234	0.245	302	462	0.4	0.3	3.961	A
B - Tesco Access	300	75	182		1048	0.286	301	181	0.6	0.4	5.040	A
C - Clonard Road	330	82	212		1066	0.309	330	271	0.6	0.5	4.899	A
D - Westbrook Park	33	8	489		834	0.040	33	53	0.1	0.0	4.497	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	253	63	51	45.17	1248	0.202	253	387	0.3	0.3	3.707	A
B - Tesco Access	251	63	152		1064	0.236	252	151	0.4	0.3	4.636	A
C - Clonard Road	276	69	177		1085	0.254	277	227	0.5	0.3	4.455	A
D - Westbrook Park	28	7	409		873	0.032	28	44	0.0	0.0	4.260	A

DN 2042, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.43	5.44	0.8	A	429	644
B - Tesco Access	0.22	5.50	0.3	A	173	259
C - Clonard Road	0.37	5.35	0.6	A	341	511
D - Westbrook Park	0.11	4.95	0.1	A	75	112

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	352	88	69	45.17	1234	0.285	351	323	0.0	0.4	4.276	A
B - Tesco Access	142	35	259		1008	0.140	141	161	0.0	0.2	4.677	A
C - Clonard Road	280	70	87		1135	0.246	278	313	0.0	0.3	4.387	A
D - Westbrook Park	61	15	331		911	0.067	61	33	0.0	0.1	4.334	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	421	105	83	53.94	1225	0.343	420	387	0.4	0.5	4.701	A
B - Tesco Access	169	42	310		982	0.172	169	193	0.2	0.2	4.994	A
C - Clonard Road	334	83	104		1126	0.297	333	375	0.3	0.4	4.752	A
D - Westbrook Park	73	18	397		879	0.083	73	40	0.1	0.1	4.574	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	515	129	102	66.06	1210	0.426	514	474	0.5	0.8	5.438	A
B - Tesco Access	207	52	380		946	0.219	207	237	0.2	0.3	5.493	A
C - Clonard Road	409	102	127		1113	0.367	408	459	0.4	0.6	5.340	A
D - Westbrook Park	89	22	486		835	0.107	89	49	0.1	0.1	4.943	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	515	129	102	66.06	1215	0.424	515	474	0.8	0.8	5.413	A
B - Tesco Access	207	52	380		945	0.219	207	237	0.3	0.3	5.500	A
C - Clonard Road	409	102	127		1113	0.367	409	460	0.6	0.6	5.350	A
D - Westbrook Park	89	22	487		835	0.107	89	49	0.1	0.1	4.945	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	421	105	84	53.94	1232	0.342	422	388	0.8	0.5	4.679	A
B - Tesco Access	169	42	311		981	0.172	169	194	0.3	0.2	5.005	A
C - Clonard Road	334	83	104		1125	0.297	334	377	0.6	0.4	4.764	A
D - Westbrook Park	73	18	399		878	0.083	73	40	0.1	0.1	4.579	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	352	88	70	45.17	1244	0.283	353	325	0.5	0.4	4.251	A
B - Tesco Access	142	35	260		1008	0.141	142	162	0.2	0.2	4.693	A
C - Clonard Road	280	70	87		1135	0.246	280	315	0.4	0.3	4.407	A
D - Westbrook Park	61	15	334		910	0.067	61	33	0.1	0.1	4.344	A

DN 2042, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.32	4.52	0.5	A	328	491
B - Tesco Access	0.38	6.01	0.6	A	326	489
C - Clonard Road	0.42	5.97	0.7	A	357	536
D - Westbrook Park	0.06	5.01	0.1	A	36	54

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	269	67	54	45.17	1241	0.217	268	408	0.0	0.3	3.805	A
B - Tesco Access	268	67	161		1059	0.253	266	160	0.0	0.4	4.754	A
C - Clonard Road	293	73	187		1080	0.271	292	240	0.0	0.4	4.560	A
D - Westbrook Park	30	7	432		862	0.035	30	47	0.0	0.0	4.325	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	321	80	64	53.94	1229	0.261	321	489	0.3	0.4	4.078	A
B - Tesco Access	319	80	193		1042	0.306	319	192	0.4	0.5	5.216	A
C - Clonard Road	350	87	224		1059	0.330	349	288	0.4	0.5	5.069	A
D - Westbrook Park	36	9	518		820	0.043	35	56	0.0	0.0	4.589	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	393	98	79	66.06	1212	0.324	392	599	0.4	0.5	4.519	A
B - Tesco Access	391	98	236		1020	0.384	390	234	0.5	0.6	5.992	A
C - Clonard Road	429	107	275		1032	0.416	428	352	0.5	0.7	5.954	A
D - Westbrook Park	43	11	634		763	0.057	43	69	0.0	0.1	5.004	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	393	98	79	66.06	1215	0.323	393	600	0.5	0.5	4.509	A
B - Tesco Access	391	98	237		1020	0.384	391	235	0.6	0.6	6.007	A
C - Clonard Road	429	107	275		1031	0.416	429	353	0.7	0.7	5.973	A
D - Westbrook Park	43	11	635		762	0.057	43	69	0.1	0.1	5.008	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	321	80	64	53.94	1233	0.260	321	491	0.5	0.4	4.067	A
B - Tesco Access	319	80	194		1042	0.307	320	192	0.6	0.5	5.237	A
C - Clonard Road	350	87	225		1059	0.331	351	289	0.7	0.5	5.092	A
D - Westbrook Park	36	9	520		819	0.043	36	56	0.1	0.0	4.596	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	269	67	54	45.17	1247	0.216	269	411	0.4	0.3	3.793	A
B - Tesco Access	268	67	162		1059	0.253	268	161	0.5	0.4	4.780	A
C - Clonard Road	293	73	188		1079	0.272	294	242	0.5	0.4	4.587	A
D - Westbrook Park	30	7	435		860	0.035	30	47	0.0	0.0	4.333	A

DM 2027, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.41	5.31	0.7	A	414	621
B - Tesco Access	0.20	5.26	0.3	A	156	234
C - Clonard Road	0.48	6.33	0.9	A	448	673
D - Westbrook Park	0.10	5.27	0.1	A	67	101

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	340	85	80	45.17	1229	0.277	338	383	0.0	0.4	4.196	A
B - Tesco Access	128	32	259		1008	0.127	127	159	0.0	0.2	4.521	A
C - Clonard Road	368	92	75		1142	0.322	366	311	0.0	0.5	4.759	A
D - Westbrook Park	55	14	407		874	0.063	55	33	0.0	0.1	4.497	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	406	101	95	53.94	1218	0.333	405	459	0.4	0.5	4.606	A
B - Tesco Access	153	38	310		982	0.156	153	191	0.2	0.2	4.806	A
C - Clonard Road	439	110	90		1133	0.388	439	373	0.5	0.6	5.321	A
D - Westbrook Park	66	16	488		834	0.079	66	40	0.1	0.1	4.794	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	497	124	117	66.06	1200	0.414	496	561	0.5	0.7	5.309	A
B - Tesco Access	187	47	380		946	0.198	187	233	0.2	0.3	5.252	A
C - Clonard Road	538	135	110		1122	0.479	537	457	0.6	0.9	6.306	A
D - Westbrook Park	81	20	598		780	0.103	80	49	0.1	0.1	5.264	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	497	124	117	66.06	1205	0.413	497	563	0.7	0.7	5.288	A
B - Tesco Access	187	47	380		945	0.198	187	234	0.3	0.3	5.257	A
C - Clonard Road	538	135	110		1122	0.479	538	458	0.9	0.9	6.332	A
D - Westbrook Park	81	20	599		780	0.103	81	49	0.1	0.1	5.268	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	406	101	96	53.94	1224	0.332	407	460	0.7	0.5	4.585	A
B - Tesco Access	153	38	311		981	0.156	153	191	0.3	0.2	4.814	A
C - Clonard Road	439	110	90		1133	0.388	440	374	0.9	0.7	5.350	A
D - Westbrook Park	66	16	490		833	0.079	66	40	0.1	0.1	4.801	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	340	85	80	45.17	1237	0.275	340	385	0.5	0.4	4.175	A
B - Tesco Access	128	32	260		1008	0.127	128	160	0.2	0.2	4.534	A
C - Clonard Road	368	92	75		1141	0.322	369	313	0.7	0.5	4.793	A
D - Westbrook Park	55	14	410		873	0.063	55	34	0.1	0.1	4.507	A

DM 2027, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.40	4.99	0.7	A	398	598
B - Tesco Access	0.38	6.27	0.6	A	303	455
C - Clonard Road	0.45	6.29	0.8	A	398	597
D - Westbrook Park	0.07	5.12	0.1	A	43	64

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	327	82	64	45.17	1236	0.264	325	413	0.0	0.4	4.008	A
B - Tesco Access	249	62	241		1018	0.244	247	149	0.0	0.3	4.837	A
C - Clonard Road	326	82	164		1092	0.299	325	324	0.0	0.4	4.680	A
D - Westbrook Park	35	9	443		857	0.041	35	47	0.0	0.0	4.379	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	390	98	77	53.94	1226	0.318	390	495	0.4	0.5	4.373	A
B - Tesco Access	297	74	288		993	0.299	297	179	0.3	0.4	5.355	A
C - Clonard Road	390	97	197		1074	0.363	389	388	0.4	0.6	5.251	A
D - Westbrook Park	42	10	530		813	0.051	42	56	0.0	0.1	4.664	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	478	119	94	66.06	1210	0.395	477	606	0.5	0.7	4.988	A
B - Tesco Access	364	91	353		960	0.379	363	219	0.4	0.6	6.249	A
C - Clonard Road	477	119	241		1050	0.455	476	475	0.6	0.8	6.265	A
D - Westbrook Park	51	13	649		755	0.068	51	68	0.1	0.1	5.113	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	478	119	95	66.06	1214	0.394	478	607	0.7	0.7	4.971	A
B - Tesco Access	364	91	353		959	0.379	364	219	0.6	0.6	6.267	A
C - Clonard Road	477	119	242		1050	0.455	477	475	0.8	0.8	6.290	A
D - Westbrook Park	51	13	651		754	0.068	51	68	0.1	0.1	5.118	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	390	98	77	53.94	1231	0.317	391	497	0.7	0.5	4.355	A
B - Tesco Access	297	74	289		993	0.299	298	179	0.6	0.4	5.376	A
C - Clonard Road	390	97	198		1074	0.363	391	389	0.8	0.6	5.278	A
D - Westbrook Park	42	10	533		812	0.051	42	56	0.1	0.1	4.873	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	327	82	65	45.17	1244	0.263	327	416	0.5	0.4	3.991	A
B - Tesco Access	249	62	242		1017	0.245	249	150	0.4	0.3	4.864	A
C - Clonard Road	326	82	166		1092	0.299	327	326	0.6	0.4	4.711	A
D - Westbrook Park	35	9	446		855	0.041	35	47	0.1	0.0	4.391	A

DM 2032, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.44	5.60	0.8	A	441	662
B - Tesco Access	0.22	5.49	0.3	A	167	251
C - Clonard Road	0.50	6.68	1.0	A	469	704
D - Westbrook Park	0.11	5.43	0.1	A	72	108

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	362	90	84	45.17	1227	0.295	360	403	0.0	0.4	4.336	A
B - Tesco Access	137	34	275		1000	0.137	137	169	0.0	0.2	4.651	A
C - Clonard Road	385	96	81		1138	0.338	383	331	0.0	0.5	4.888	A
D - Westbrook Park	59	15	428		864	0.068	59	35	0.0	0.1	4.575	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	432	108	100	53.94	1217	0.355	432	483	0.4	0.6	4.795	A
B - Tesco Access	164	41	330		972	0.169	164	202	0.2	0.2	4.974	A
C - Clonard Road	460	115	97		1130	0.407	459	397	0.5	0.7	5.515	A
D - Westbrook Park	70	18	513		822	0.086	70	42	0.1	0.1	4.901	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	529	132	123	66.06	1200	0.441	528	591	0.6	0.8	5.597	A
B - Tesco Access	201	50	403		933	0.215	201	248	0.2	0.3	5.483	A
C - Clonard Road	563	141	118		1118	0.504	562	486	0.7	1.0	6.643	A
D - Westbrook Park	86	22	628		765	0.112	86	52	0.1	0.1	5.420	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	529	132	123	66.06	1205	0.439	529	593	0.8	0.8	5.570	A
B - Tesco Access	201	50	404		933	0.215	201	248	0.3	0.3	5.490	A
C - Clonard Road	563	141	118		1118	0.504	563	487	1.0	1.0	6.676	A
D - Westbrook Park	86	22	630		765	0.113	86	52	0.1	0.1	5.428	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	432	108	101	53.94	1224	0.353	433	485	0.8	0.6	4.768	A
B - Tesco Access	164	41	331		971	0.169	164	203	0.3	0.2	4.983	A
C - Clonard Road	460	115	97		1129	0.407	461	398	1.0	0.7	5.548	A
D - Westbrook Park	70	18	515		821	0.086	70	43	0.1	0.1	4.910	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	362	90	84	45.17	1237	0.293	362	406	0.6	0.4	4.312	A
B - Tesco Access	137	34	277		999	0.137	138	170	0.2	0.2	4.666	A
C - Clonard Road	385	96	81		1138	0.338	386	333	0.7	0.5	4.924	A
D - Westbrook Park	59	15	431		862	0.068	59	36	0.1	0.1	4.588	A

DM 2032, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.42	5.16	0.7	A	418	628
B - Tesco Access	0.41	6.66	0.7	A	323	485
C - Clonard Road	0.48	6.70	0.9	A	419	629
D - Westbrook Park	0.07	5.28	0.1	A	45	67

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	343	86	67	45.17	1235	0.278	342	438	0.0	0.4	4.088	A
B - Tesco Access	265	66	250		1013	0.262	264	159	0.0	0.4	5.003	A
C - Clonard Road	344	86	176		1086	0.317	342	338	0.0	0.5	4.828	A
D - Westbrook Park	37	9	469		844	0.044	37	49	0.0	0.0	4.458	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	410	102	81	53.94	1225	0.335	409	525	0.4	0.5	4.481	A
B - Tesco Access	317	79	300		987	0.321	316	190	0.4	0.5	5.593	A
C - Clonard Road	411	103	211		1067	0.385	410	406	0.5	0.6	5.477	A
D - Westbrook Park	44	11	562		798	0.055	44	59	0.0	0.1	4.772	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	502	126	99	66.06	1209	0.415	501	642	0.5	0.7	5.159	A
B - Tesco Access	388	97	367		952	0.408	387	233	0.5	0.7	6.632	A
C - Clonard Road	503	126	258		1041	0.483	502	496	0.6	0.9	6.666	A
D - Westbrook Park	54	13	688		736	0.073	54	72	0.1	0.1	5.273	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	502	126	99	66.06	1214	0.414	502	644	0.7	0.7	5.139	A
B - Tesco Access	388	97	368		952	0.408	388	233	0.7	0.7	6.657	A
C - Clonard Road	503	126	259		1040	0.484	503	497	0.9	0.9	6.699	A
D - Westbrook Park	54	13	689		736	0.073	54	72	0.1	0.1	5.279	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	410	102	81	53.94	1231	0.333	411	527	0.7	0.5	4.463	A
B - Tesco Access	317	79	301		986	0.321	318	191	0.7	0.5	5.620	A
C - Clonard Road	411	103	212		1066	0.385	412	407	0.9	0.6	5.514	A
D - Westbrook Park	44	11	564		797	0.055	44	59	0.1	0.1	4.783	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	343	86	68	45.17	1244	0.276	344	441	0.5	0.4	4.066	A
B - Tesco Access	265	66	252		1012	0.262	266	160	0.5	0.4	5.034	A
C - Clonard Road	344	86	177		1085	0.317	345	341	0.6	0.5	4.865	A
D - Westbrook Park	37	9	472		842	0.044	37	50	0.1	0.0	4.469	A

DM 2042, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.47	5.87	0.9	A	467	701
B - Tesco Access	0.23	5.72	0.3	A	179	269
C - Clonard Road	0.53	7.06	1.1	A	490	735
D - Westbrook Park	0.12	5.60	0.1	A	76	114

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	384	96	88	45.17	1226	0.313	382	423	0.0	0.5	4.454	A
B - Tesco Access	147	37	291		992	0.148	146	178	0.0	0.2	4.769	A
C - Clonard Road	402	101	87		1135	0.354	400	351	0.0	0.6	5.021	A
D - Westbrook Park	62	16	449		853	0.073	62	38	0.0	0.1	4.654	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	458	114	105	53.94	1216	0.377	457	508	0.5	0.6	4.961	A
B - Tesco Access	175	44	349		962	0.182	175	214	0.2	0.2	5.130	A
C - Clonard Road	480	120	104		1126	0.427	480	420	0.6	0.8	5.723	A
D - Westbrook Park	75	19	538		810	0.092	75	45	0.1	0.1	5.012	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	561	140	129	66.06	1200	0.467	560	621	0.6	0.9	5.870	A
B - Tesco Access	215	54	427		921	0.233	215	261	0.2	0.3	5.709	A
C - Clonard Road	588	147	127		1113	0.529	587	515	0.8	1.1	7.019	A
D - Westbrook Park	91	23	659		750	0.122	91	55	0.1	0.1	5.588	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	561	140	129	66.06	1206	0.465	561	623	0.9	0.9	5.837	A
B - Tesco Access	215	54	428		921	0.233	215	262	0.3	0.3	5.717	A
C - Clonard Road	588	147	127		1113	0.529	588	515	1.1	1.1	7.059	A
D - Westbrook Park	91	23	660		750	0.122	91	55	0.1	0.1	5.597	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	458	114	106	53.94	1224	0.374	459	510	0.9	0.6	4.930	A
B - Tesco Access	175	44	350		961	0.183	176	215	0.3	0.3	5.141	A
C - Clonard Road	480	120	104		1125	0.427	482	422	1.1	0.8	5.765	A
D - Westbrook Park	75	19	541		808	0.092	75	45	0.1	0.1	5.023	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	384	96	88	45.17	1236	0.310	384	427	0.6	0.5	4.424	A
B - Tesco Access	147	37	293		991	0.148	147	179	0.3	0.2	4.784	A
C - Clonard Road	402	101	87		1135	0.354	403	353	0.8	0.6	5.065	A
D - Westbrook Park	62	16	452		852	0.073	63	38	0.1	0.1	4.670	A

DM 2042, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.43	5.37	0.8	A	438	657
B - Tesco Access	0.44	7.07	0.8	A	343	515
C - Clonard Road	0.51	7.15	1.0	A	440	660
D - Westbrook Park	0.08	5.45	0.1	A	47	70

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	359	90	71	45.17	1234	0.291	358	462	0.0	0.4	4.192	A
B - Tesco Access	282	70	260		1008	0.279	280	168	0.0	0.4	5.164	A
C - Clonard Road	361	90	187		1080	0.334	359	353	0.0	0.5	4.982	A
D - Westbrook Park	38	10	494		831	0.046	38	52	0.0	0.0	4.537	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	429	107	85	53.94	1224	0.350	429	553	0.4	0.5	4.621	A
B - Tesco Access	336	84	312		981	0.343	336	201	0.4	0.5	5.833	A
C - Clonard Road	431	108	224		1059	0.407	430	423	0.5	0.7	5.718	A
D - Westbrook Park	46	11	592		783	0.059	46	62	0.0	0.1	4.882	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	526	131	103	66.06	1209	0.435	525	677	0.5	0.8	5.370	A
B - Tesco Access	412	103	381		945	0.436	411	247	0.5	0.8	7.045	A
C - Clonard Road	528	132	274		1032	0.512	526	518	0.7	1.0	7.104	A
D - Westbrook Park	56	14	724		718	0.078	56	76	0.1	0.1	5.438	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	526	131	104	66.06	1214	0.433	526	679	0.8	0.8	5.344	A
B - Tesco Access	412	103	382		944	0.436	412	247	0.8	0.8	7.073	A
C - Clonard Road	528	132	275		1031	0.512	528	519	1.0	1.0	7.148	A
D - Westbrook Park	56	14	726		717	0.078	56	76	0.1	0.1	5.446	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	429	107	85	53.94	1231	0.349	430	556	0.8	0.6	4.599	A
B - Tesco Access	336	84	313		980	0.343	337	202	0.8	0.6	5.867	A
C - Clonard Road	431	108	225		1059	0.407	432	425	1.0	0.7	5.761	A
D - Westbrook Park	46	11	595		782	0.059	46	63	0.1	0.1	4.892	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	359	90	71	45.17	1243	0.289	360	465	0.6	0.4	4.168	A
B - Tesco Access	282	70	262		1007	0.280	282	169	0.6	0.4	5.201	A
C - Clonard Road	361	90	188		1079	0.334	362	355	0.7	0.5	5.023	A
D - Westbrook Park	38	10	498		830	0.046	39	52	0.1	0.0	4.552	A

DS 2027, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.42	5.41	0.8	A	424	635
B - Tesco Access	0.20	5.31	0.3	A	158	236
C - Clonard Road	0.52	6.85	1.1	A	485	728
D - Westbrook Park	0.11	5.43	0.1	A	68	101

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	348	87	84	45.17	1226	0.283	346	408	0.0	0.4	4.244	A
B - Tesco Access	129	32	267		1004	0.129	129	163	0.0	0.2	4.547	A
C - Clonard Road	398	100	75		1142	0.349	396	321	0.0	0.5	4.948	A
D - Westbrook Park	55	14	436		860	0.064	55	34	0.0	0.1	4.578	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	415	104	101	53.94	1215	0.341	414	489	0.4	0.5	4.672	A
B - Tesco Access	154	39	320		977	0.158	154	196	0.2	0.2	4.841	A
C - Clonard Road	476	119	90		1133	0.420	475	384	0.5	0.7	5.611	A
D - Westbrook Park	66	17	523		817	0.081	66	41	0.1	0.1	4.905	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	508	127	123	66.06	1198	0.424	507	598	0.5	0.8	5.415	A
B - Tesco Access	189	47	391		940	0.201	189	239	0.2	0.3	5.305	A
C - Clonard Road	582	146	110		1122	0.519	581	470	0.7	1.1	6.815	A
D - Westbrook Park	81	20	640		760	0.107	81	50	0.1	0.1	5.429	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	508	127	124	66.06	1203	0.423	508	599	0.8	0.8	5.391	A
B - Tesco Access	189	47	392		939	0.201	189	240	0.3	0.3	5.310	A
C - Clonard Road	582	146	110		1122	0.519	582	471	1.1	1.1	6.850	A
D - Westbrook Park	81	20	642		759	0.107	81	51	0.1	0.1	5.434	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	415	104	101	53.94	1222	0.340	416	491	0.8	0.5	4.649	A
B - Tesco Access	154	39	321		976	0.158	155	196	0.3	0.2	4.851	A
C - Clonard Road	476	119	90		1133	0.420	477	385	1.1	0.8	5.649	A
D - Westbrook Park	66	17	525		816	0.081	66	41	0.1	0.1	4.914	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	348	87	85	45.17	1235	0.281	348	411	0.5	0.4	4.221	A
B - Tesco Access	129	32	268		1003	0.129	130	164	0.2	0.2	4.558	A
C - Clonard Road	398	100	75		1141	0.349	399	323	0.8	0.6	4.987	A
D - Westbrook Park	55	14	440		858	0.065	55	35	0.1	0.1	4.591	A

DS 2027, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.42	5.22	0.7	A	425	638
B - Tesco Access	0.39	6.53	0.7	A	307	461
C - Clonard Road	0.48	6.57	0.9	A	419	628
D - Westbrook Park	0.07	5.22	0.1	A	45	68

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	349	87	69	45.17	1235	0.283	348	426	0.0	0.4	4.116	A
B - Tesco Access	252	63	265		1005	0.251	251	151	0.0	0.3	4.938	A
C - Clonard Road	343	86	164		1092	0.314	342	351	0.0	0.5	4.784	A
D - Westbrook Park	37	9	458		849	0.044	37	48	0.0	0.0	4.431	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	417	104	82	53.94	1225	0.340	416	511	0.4	0.5	4.522	A
B - Tesco Access	301	75	317		978	0.308	301	181	0.3	0.5	5.507	A
C - Clonard Road	410	103	197		1074	0.382	409	421	0.5	0.6	5.411	A
D - Westbrook Park	44	11	549		804	0.055	44	57	0.0	0.1	4.736	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	511	128	101	66.06	1209	0.422	510	626	0.5	0.7	5.224	A
B - Tesco Access	369	92	388		941	0.392	368	222	0.5	0.7	6.503	A
C - Clonard Road	502	126	241		1050	0.478	501	515	0.6	0.9	6.543	A
D - Westbrook Park	54	14	672		744	0.073	54	70	0.1	0.1	5.219	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	511	128	101	66.06	1214	0.421	511	627	0.7	0.7	5.202	A
B - Tesco Access	369	92	389		941	0.392	369	222	0.7	0.7	6.525	A
C - Clonard Road	502	126	242		1050	0.478	502	516	0.9	0.9	6.575	A
D - Westbrook Park	54	14	673		743	0.073	54	70	0.1	0.1	5.225	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	417	104	82	53.94	1231	0.339	418	513	0.7	0.5	4.501	A
B - Tesco Access	301	75	318		977	0.308	302	182	0.7	0.5	5.533	A
C - Clonard Road	410	103	198		1074	0.382	411	422	0.9	0.6	5.442	A
D - Westbrook Park	44	11	551		803	0.055	44	58	0.1	0.1	4.744	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	349	87	69	45.17	1243	0.281	350	430	0.5	0.4	4.094	A
B - Tesco Access	252	63	266		1004	0.251	253	152	0.5	0.4	4.969	A
C - Clonard Road	343	86	166		1092	0.315	344	353	0.6	0.5	4.819	A
D - Westbrook Park	37	9	461		847	0.044	37	48	0.1	0.0	4.442	A

DS 2032, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.45	5.68	0.8	A	450	675
B - Tesco Access	0.22	5.55	0.3	A	169	253
C - Clonard Road	0.54	7.25	1.2	A	506	760
D - Westbrook Park	0.12	5.60	0.1	A	72	108

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	369	92	88	45.17	1225	0.302	368	428	0.0	0.4	4.359	A
B - Tesco Access	139	35	283		996	0.139	138	173	0.0	0.2	4.679	A
C - Clonard Road	415	104	81		1138	0.365	413	340	0.0	0.6	5.085	A
D - Westbrook Park	59	15	457		849	0.070	59	36	0.0	0.1	4.660	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	441	110	106	53.94	1214	0.363	441	513	0.4	0.6	4.835	A
B - Tesco Access	166	41	339		967	0.171	165	207	0.2	0.2	5.012	A
C - Clonard Road	496	124	97		1130	0.439	495	408	0.6	0.8	5.826	A
D - Westbrook Park	71	18	548		805	0.088	71	44	0.1	0.1	5.017	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	540	135	129	66.06	1198	0.451	539	628	0.6	0.8	5.675	A
B - Tesco Access	203	51	415		927	0.219	202	254	0.2	0.3	5.540	A
C - Clonard Road	608	152	118		1118	0.544	606	499	0.8	1.2	7.207	A
D - Westbrook Park	87	22	671		745	0.116	86	54	0.1	0.1	5.596	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	540	135	130	66.06	1203	0.449	540	629	0.8	0.8	5.647	A
B - Tesco Access	203	51	416		927	0.219	203	254	0.3	0.3	5.547	A
C - Clonard Road	608	152	118		1118	0.544	608	500	1.2	1.2	7.254	A
D - Westbrook Park	87	22	672		744	0.116	87	54	0.1	0.1	5.605	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	441	110	106	53.94	1222	0.361	442	515	0.8	0.6	4.808	A
B - Tesco Access	166	41	340		966	0.171	166	208	0.3	0.2	5.024	A
C - Clonard Road	496	124	97		1129	0.439	498	409	1.2	0.8	5.873	A
D - Westbrook Park	71	18	551		804	0.088	71	44	0.1	0.1	5.028	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	369	92	89	45.17	1235	0.299	370	431	0.6	0.4	4.333	A
B - Tesco Access	139	35	285		995	0.139	139	174	0.2	0.2	4.695	A
C - Clonard Road	415	104	81		1138	0.365	416	342	0.8	0.6	5.131	A
D - Westbrook Park	59	15	461		848	0.070	59	37	0.1	0.1	4.672	A

DS 2032, PM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.44	5.41	0.8	A	446	668
B - Tesco Access	0.42	6.95	0.8	A	328	491
C - Clonard Road	0.51	7.02	1.0	A	440	660
D - Westbrook Park	0.08	5.39	0.1	A	47	71

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	366	91	72	45.17	1233	0.296	364	451	0.0	0.4	4.199	A
B - Tesco Access	269	67	275		1000	0.269	267	161	0.0	0.4	5.111	A
C - Clonard Road	361	90	176		1086	0.332	359	366	0.0	0.5	4.940	A
D - Westbrook Park	39	10	484		836	0.046	39	51	0.0	0.0	4.512	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	436	109	86	53.94	1224	0.357	436	541	0.4	0.6	4.639	A
B - Tesco Access	321	80	329		972	0.330	320	193	0.4	0.5	5.756	A
C - Clonard Road	431	108	211		1067	0.404	430	439	0.5	0.7	5.652	A
D - Westbrook Park	46	12	580		789	0.059	46	61	0.0	0.1	4.847	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	535	134	105	66.06	1209	0.442	534	662	0.6	0.8	5.409	A
B - Tesco Access	393	98	403		934	0.421	392	236	0.5	0.7	6.918	A
C - Clonard Road	528	132	258		1041	0.507	527	537	0.7	1.0	6.984	A
D - Westbrook Park	57	14	710		725	0.078	57	74	0.1	0.1	5.386	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	535	134	105	66.06	1214	0.440	535	663	0.8	0.8	5.384	A
B - Tesco Access	393	98	403		933	0.421	393	236	0.7	0.8	6.948	A
C - Clonard Road	528	132	259		1040	0.507	528	538	1.0	1.0	7.024	A
D - Westbrook Park	57	14	712		724	0.078	57	74	0.1	0.1	5.393	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	436	109	86	53.94	1231	0.355	437	543	0.8	0.6	4.616	A
B - Tesco Access	321	80	330		971	0.330	322	194	0.8	0.5	5.787	A
C - Clonard Road	431	108	212		1066	0.404	432	440	1.0	0.7	5.692	A
D - Westbrook Park	46	12	583		788	0.059	46	61	0.1	0.1	4.857	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	366	91	72	45.17	1243	0.294	366	455	0.6	0.4	4.174	A
B - Tesco Access	269	67	276		999	0.269	269	162	0.5	0.4	5.147	A
C - Clonard Road	361	90	177		1085	0.333	362	368	0.7	0.5	4.982	A
D - Westbrook Park	39	10	488		834	0.047	39	51	0.1	0.0	4.525	A

DS 2042, AM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.48	6.00	0.9	A	477	715
B - Tesco Access	0.24	5.78	0.3	A	181	271
C - Clonard Road	0.57	7.71	1.3	A	527	791
D - Westbrook Park	0.13	5.78	0.1	A	77	115

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	391	98	92	45.17	1223	0.320	389	448	0.0	0.5	4.507	A
B - Tesco Access	148	37	299		988	0.150	147	182	0.0	0.2	4.797	A
C - Clonard Road	433	108	87		1135	0.381	430	360	0.0	0.6	5.233	A
D - Westbrook Park	63	16	478		839	0.075	62	39	0.0	0.1	4.741	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	467	117	111	53.94	1214	0.385	466	537	0.5	0.6	5.037	A
B - Tesco Access	177	44	358		957	0.185	177	219	0.2	0.3	5.170	A
C - Clonard Road	517	129	104		1126	0.459	516	431	0.6	0.9	6.048	A
D - Westbrook Park	75	19	573		792	0.095	75	46	0.1	0.1	5.134	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	572	143	135	66.06	1198	0.477	571	658	0.6	0.9	5.996	A
B - Tesco Access	217	54	439		915	0.237	216	268	0.3	0.3	5.771	A
C - Clonard Road	633	158	127		1113	0.569	631	528	0.9	1.3	7.647	A
D - Westbrook Park	92	23	701		730	0.126	92	57	0.1	0.1	5.774	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	572	143	136	66.06	1204	0.475	572	659	0.9	0.9	5.958	A
B - Tesco Access	217	54	439		915	0.237	217	268	0.3	0.3	5.779	A
C - Clonard Road	633	158	127		1113	0.569	633	529	1.3	1.3	7.707	A
D - Westbrook Park	92	23	703		729	0.126	92	57	0.1	0.1	5.785	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	467	117	111	53.94	1222	0.382	468	540	0.9	0.7	5.005	A
B - Tesco Access	177	44	360		956	0.185	177	220	0.3	0.3	5.182	A
C - Clonard Road	517	129	104		1125	0.459	518	433	1.3	0.9	6.117	A
D - Westbrook Park	75	19	576		791	0.095	75	46	0.1	0.1	5.148	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	391	98	93	45.17	1234	0.317	392	452	0.7	0.5	4.477	A
B - Tesco Access	148	37	301		986	0.150	148	184	0.3	0.2	4.815	A
C - Clonard Road	433	108	87		1135	0.381	434	362	0.9	0.6	5.285	A
D - Westbrook Park	63	16	482		837	0.075	63	39	0.1	0.1	4.759	A

DS 2042, PM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
A - Chapel Street	0.46	5.60	0.9	A	465	698
B - Tesco Access	0.45	7.40	0.9	A	347	521
C - Clonard Road	0.54	7.52	1.1	A	461	691
D - Westbrook Park	0.08	5.57	0.1	A	50	74

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	382	95	75	45.17	1232	0.310	380	475	0.0	0.5	4.283	A
B - Tesco Access	285	71	284		995	0.286	283	170	0.0	0.4	5.282	A
C - Clonard Road	378	94	187		1080	0.350	376	381	0.0	0.5	5.098	A
D - Westbrook Park	41	10	509		824	0.049	40	53	0.0	0.1	4.594	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	456	114	90	53.94	1223	0.373	455	570	0.5	0.6	4.759	A
B - Tesco Access	340	85	341		966	0.352	340	204	0.4	0.6	6.014	A
C - Clonard Road	451	113	224		1059	0.426	450	456	0.5	0.7	5.905	A
D - Westbrook Park	49	12	611		774	0.063	48	64	0.1	0.1	4.961	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	558	140	110	66.06	1209	0.462	557	697	0.6	0.9	5.604	A
B - Tesco Access	417	104	417		926	0.450	416	250	0.6	0.8	7.365	A
C - Clonard Road	553	138	274		1032	0.536	551	559	0.7	1.1	7.464	A
D - Westbrook Park	59	15	747		707	0.084	59	78	0.1	0.1	5.558	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	558	140	110	66.06	1214	0.460	558	699	0.9	0.9	5.574	A
B - Tesco Access	417	104	418		926	0.450	417	250	0.8	0.9	7.403	A
C - Clonard Road	553	138	275		1031	0.536	553	560	1.1	1.1	7.520	A
D - Westbrook Park	59	15	749		706	0.084	59	78	0.1	0.1	5.567	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	456	114	90	53.94	1231	0.370	457	572	0.9	0.6	4.731	A
B - Tesco Access	340	85	342		965	0.353	341	205	0.9	0.6	6.050	A
C - Clonard Road	451	113	225		1059	0.426	453	458	1.1	0.8	5.956	A
D - Westbrook Park	49	12	614		773	0.063	49	64	0.1	0.1	4.975	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Pedestrian demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
A - Chapel Street	382	95	75	45.17	1242	0.307	382	479	0.6	0.5	4.257	A
B - Tesco Access	285	71	286		994	0.287	286	171	0.6	0.4	5.323	A
C - Clonard Road	378	94	188		1079	0.350	379	383	0.8	0.5	5.148	A
D - Westbrook Park	41	10	513		822	0.049	41	54	0.1	0.1	4.608	A

J6 - R122/ Harry Reynolds Road Junction Modelling Report

RECEIVED: 18/12/2025

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site 6 Chapel Street Harry Reynolds Rd.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

RECEIVED: 18/12/2025

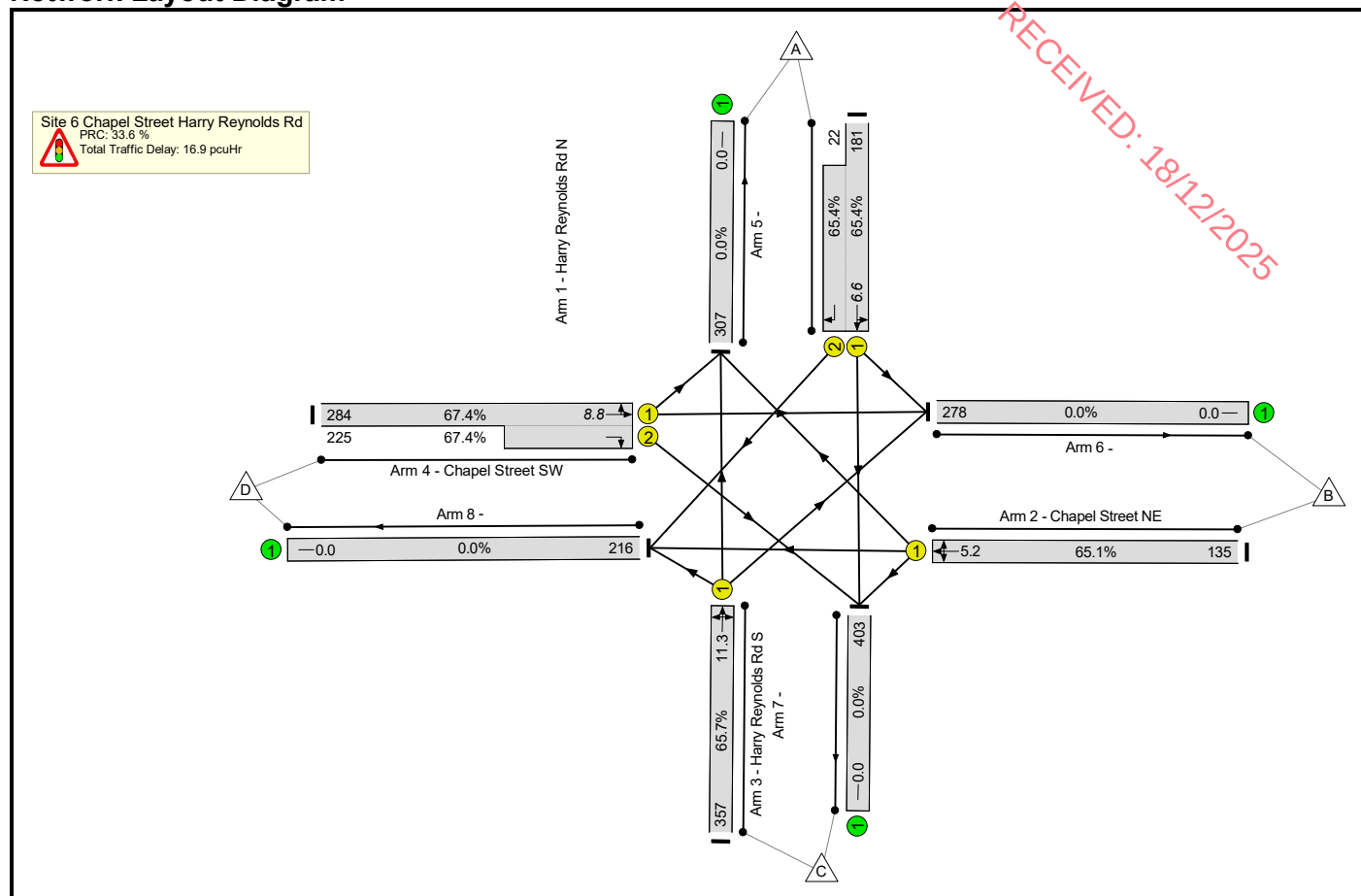
Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	Base 2025	Base Year (2025) AM	Network Control Plan 1	08:00 - 09:00	120	33.6	16.87
2	Base 2025	Base Year (2025) PM	Network Control Plan 1	16:45 - 17:45	120	41.1	16.09
3	DN 2027	YoO DN (2027) AM	Network Control Plan 1	08:00 - 09:00	120	29.4	17.82
4	DN 2027	YoO DN (2027) PM	Network Control Plan 1	16:45 - 17:45	120	36.3	16.90
5	DN 2032	YoO+5 DN (2032) AM	Network Control Plan 1	08:00 - 09:00	120	20.7	20.07
6	DN 2032	YoO+5 DN (2032) PM	Network Control Plan 1	16:45 - 17:45	120	27.4	18.85
7	DN 2042	YoO+15 DN (2042) AM	Network Control Plan 1	08:00 - 09:00	120	13.1	22.82
8	DN 2042	YoO+15 DN (2042) PM	Network Control Plan 1	16:45 - 17:45	120	19.9	20.92
9	DM 2027	YoO DM (2027) AM	Network Control Plan 1	08:00 - 09:00	120	13.0	22.81
10	DM 2027	YoO DM (2027) PM	Network Control Plan 1	16:45 - 17:45	120	18.9	20.96
11	DM 2032	YoO+5 DM (2032) AM	Network Control Plan 1	08:00 - 09:00	120	7.3	26.28
12	DM 2032	YoO+5 DM (2032) PM	Network Control Plan 1	16:45 - 17:45	120	12.1	23.62
13	DM 2042	YoO+15 DM (2042) AM	Network Control Plan 1	08:00 - 09:00	120	0.7	31.27
14	DM 2042	YoO+15 DM (2042) PM	Network Control Plan 1	16:45 - 17:45	120	6.2	26.92
15	DS 2027	YoO DS (2027) AM	Network Control Plan 1	08:00 - 09:00	120	9.6	24.30
16	DS 2027	YoO DS (2027) PM	Network Control Plan 1	16:45 - 17:45	120	15.2	22.35
17	DS 2032	YoO+5 DS (2032) AM	Network Control Plan 1	08:00 - 09:00	120	3.2	28.36
18	DS 2032	YoO+5 DS (2032) PM	Network Control Plan 1	16:45 - 17:45	120	9.0	25.30
19	DS 2042	YoO+15 DS (2042) AM	Network Control Plan 1	08:00 - 09:00	120	-1.8	34.54
20	DS 2042	YoO+15 DS (2042) PM	Network Control Plan 1	16:45 - 17:45	120	3.4	28.94

Basic Results Summary

Scenario 1: 'Base 2025' (FG1: 'Base Year (2025) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

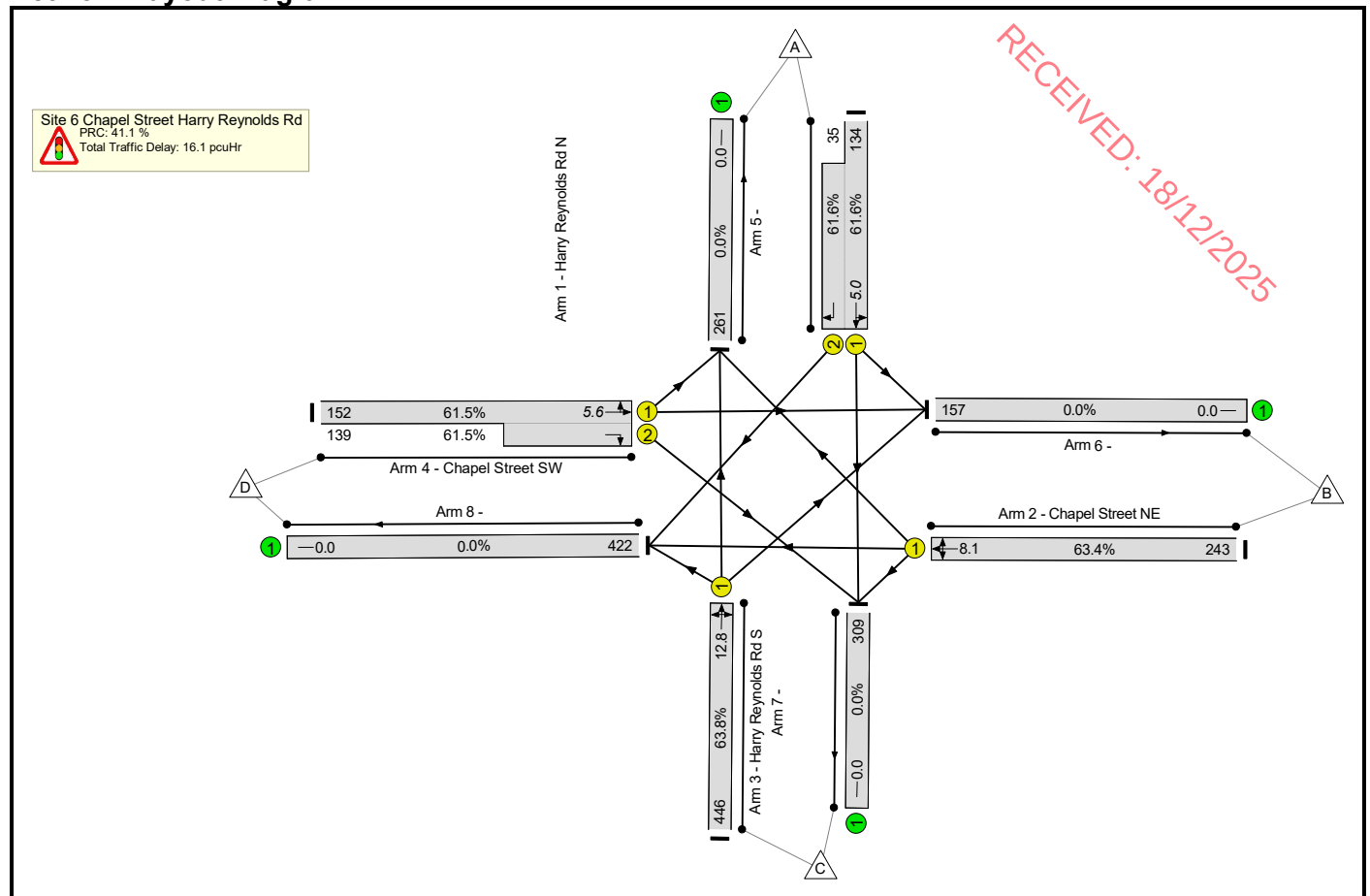
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	67.4%	0	0	0	16.9	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	67.4%	0	0	0	16.9	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	17	-	-	203	1844:1856	277+34	65.4 : 65.4%	-	-	-	3.6	64.1	6.6
2/1	Chapel Street NE Right Left Ahead	U	D		1	13	-	-	135	1777	207	65.1%	-	-	-	2.8	75.0	5.2
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	35	-	-	357	1811	543	65.7%	-	-	-	4.6	46.2	11.3
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	35	-	-	509	1851:1787	421+334	67.4 : 67.4%	-	-	-	5.9	41.5	8.8
C1 PRC for Signalled Lanes (%): 33.6 PRC Over All Lanes (%): 33.6 Total Delay for Signalled Lanes (pcuHr): 16.87 Total Delay Over All Lanes(pcuHr): 16.87 Cycle Time (s): 120																		

Basic Results Summary

Scenario 2: 'Base 2025' (FG2: 'Base Year (2025) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

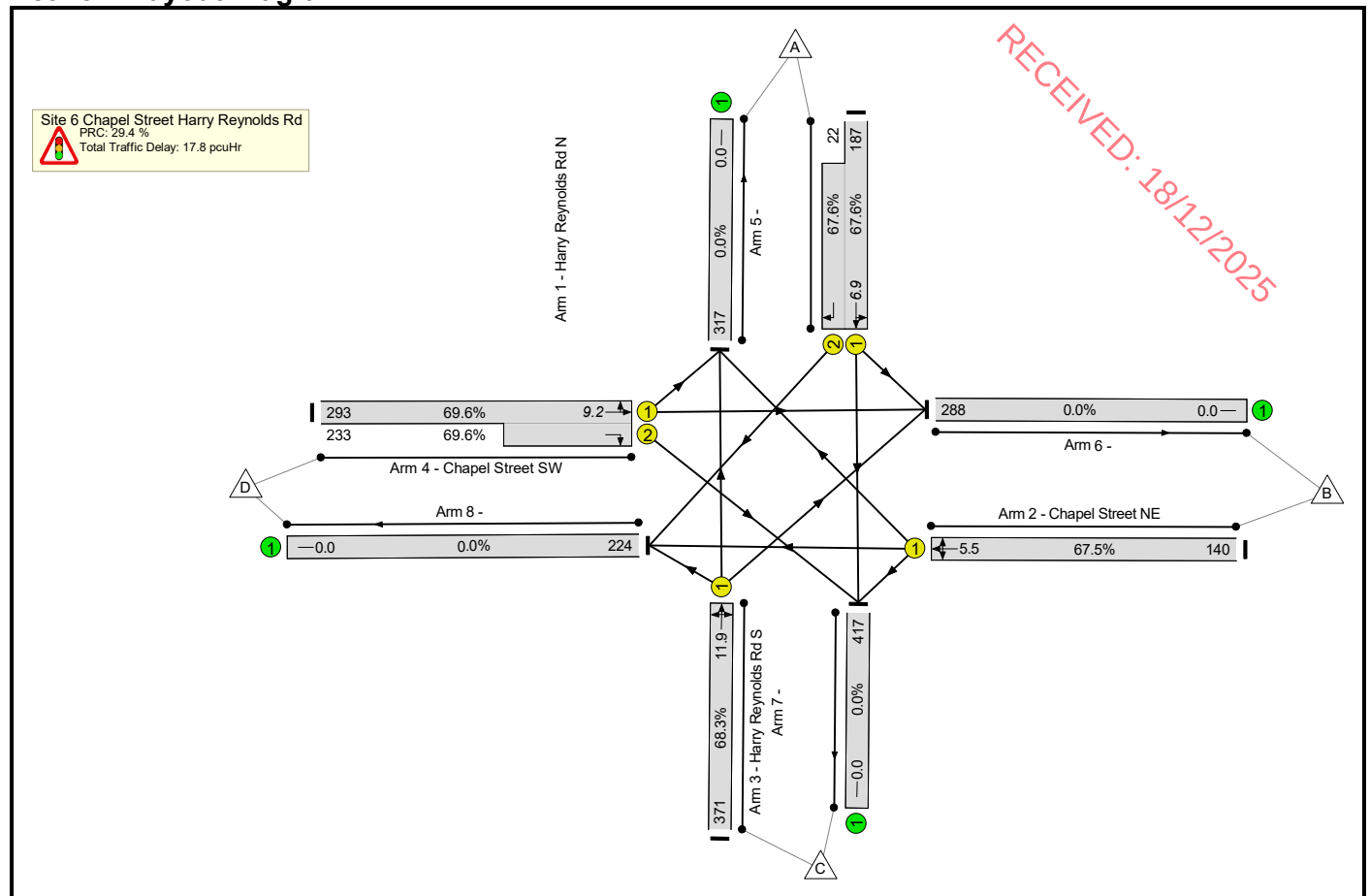
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	63.8%	0	0	0	16.1	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	63.8%	0	0	0	16.1	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	13	-	-	169	1866:1856	218+57	61.6 : 61.6%	-	-	-	3.1	66.7	5.0
2/1	Chapel Street NE Right Left Ahead	U	D		1	25	-	-	243	1769	383	63.4%	-	-	-	3.7	55.4	8.1
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	47	-	-	446	1748	699	63.8%	-	-	-	4.5	36.1	12.8
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	15	-	-	291	1853:1787	247+226	61.5 : 61.5%	-	-	-	4.8	58.8	5.6
C1 PRC for Signalled Lanes (%): 41.1 Total Delay for Signalled Lanes (pcuHr): 16.09 Cycle Time (s): 120 PRC Over All Lanes (%): 41.1 Total Delay Over All Lanes(pcuHr): 16.09																		

Basic Results Summary

Scenario 3: 'DN 2027' (FG3: 'YoO DN (2027) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

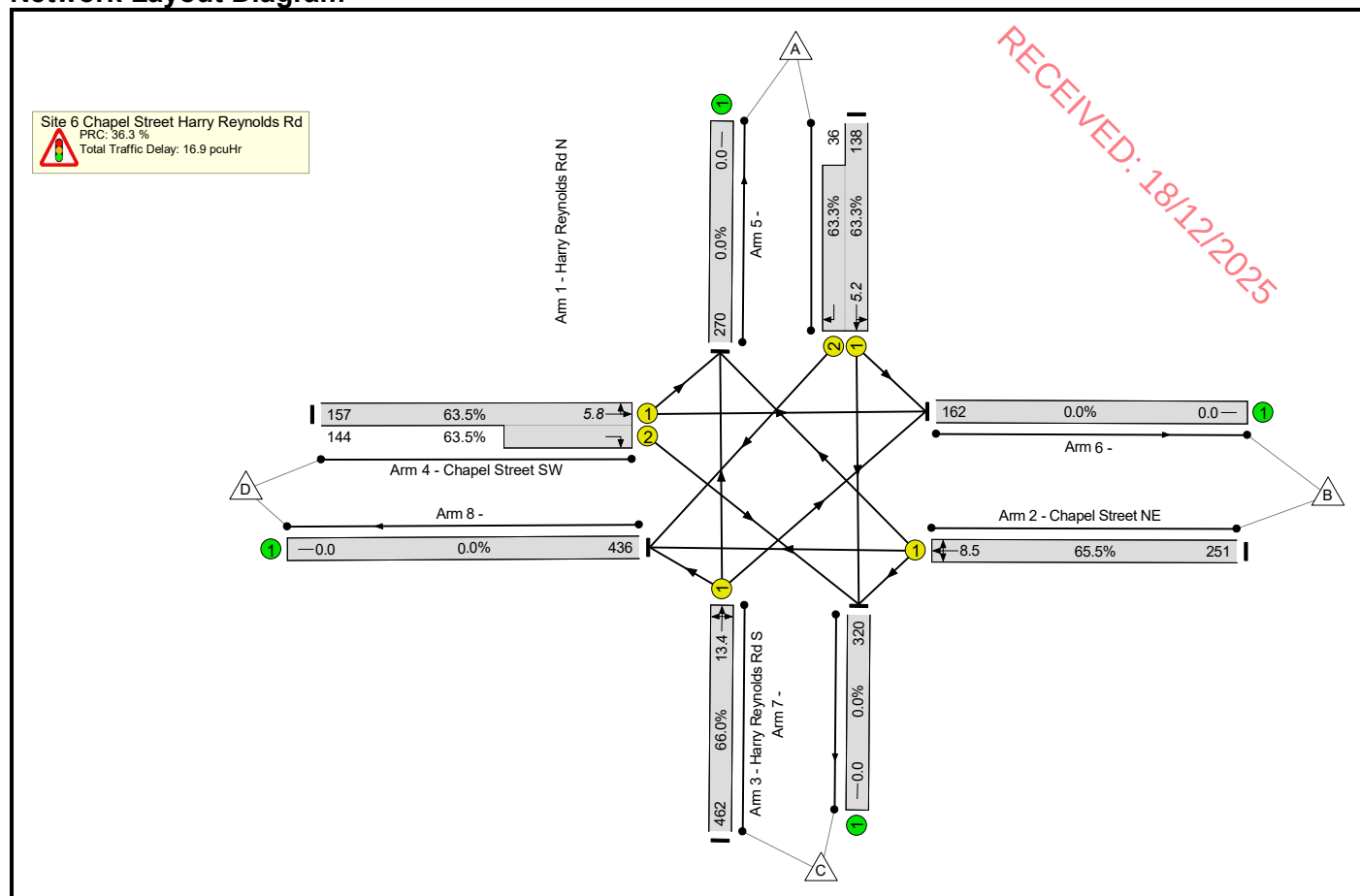
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	69.6%	0	0	0	17.8	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	69.6%	0	0	0	17.8	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	17	-	-	209	1844:1856	277+33	67.6 : 67.6%	-	-	-	3.8	65.4	6.9
2/1	Chapel Street NE Right Left Ahead	U	D		1	13	-	-	140	1777	207	67.5%	-	-	-	3.0	76.8	5.5
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	35	-	-	371	1811	543	68.3%	-	-	-	4.9	47.3	11.9
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	35	-	-	526	1851:1787	421+335	69.6 : 69.6%	-	-	-	6.2	42.2	9.2
C1 PRC for Signalled Lanes (%): 29.4 Total Delay for Signalled Lanes (pcuHr): 17.82 Cycle Time (s): 120 PRC Over All Lanes (%): 29.4 Total Delay Over All Lanes(pcuHr): 17.82																		

Basic Results Summary

Scenario 4: 'DN 2027' (FG4: 'YoO DN (2027) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

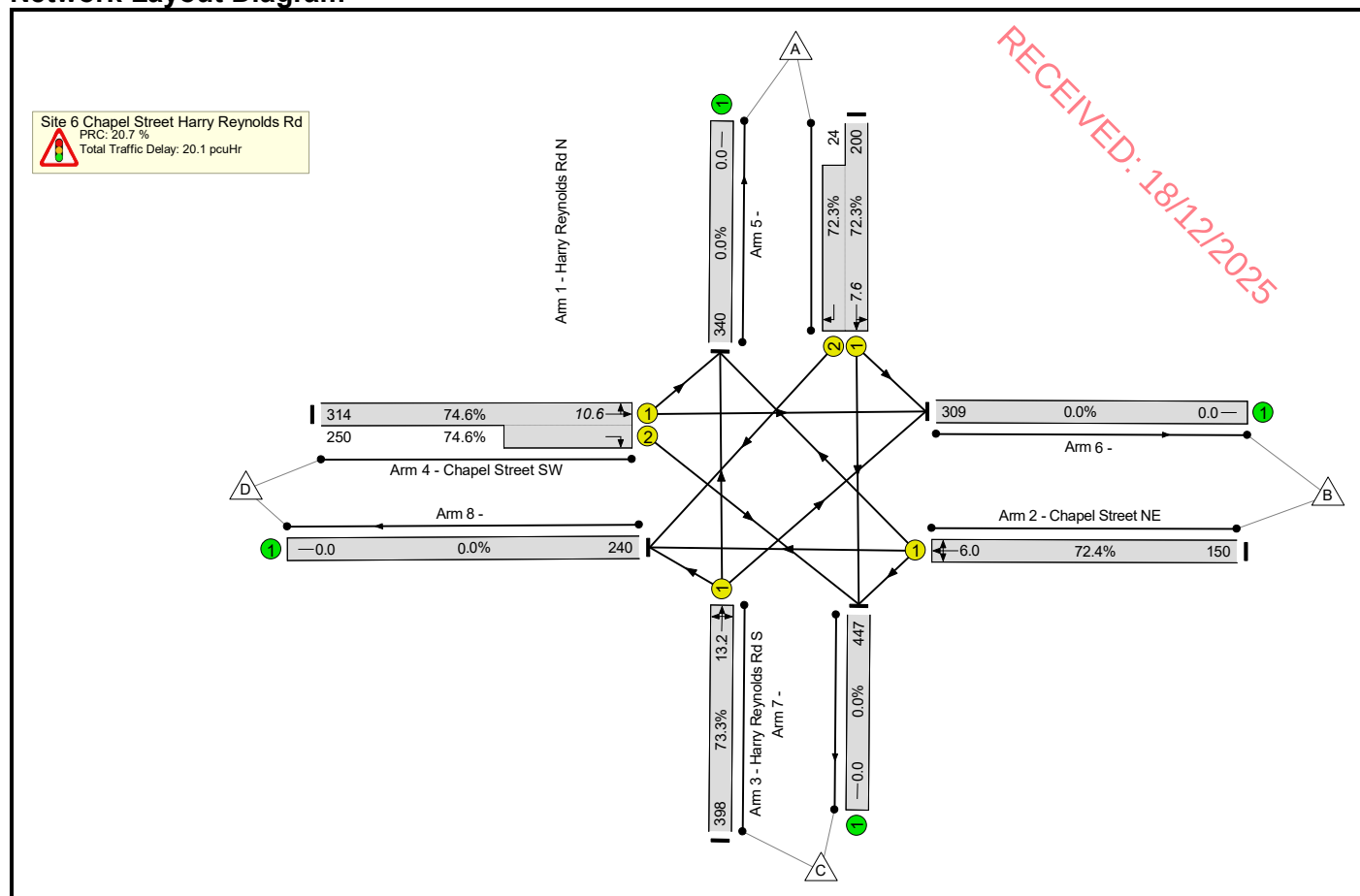
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	66.0%	0	0	0	16.9	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	66.0%	0	0	0	16.9	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	13	-	-	174	1868:1856	218+57	63.3 : 63.3%	-	-	-	3.3	67.5	5.2
2/1	Chapel Street NE Right Left Ahead	U	D		1	25	-	-	251	1769	383	65.5%	-	-	-	3.9	56.3	8.5
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	47	-	-	462	1749	700	66.0%	-	-	-	4.7	36.9	13.4
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	15	-	-	301	1853:1787	247+227	63.5 : 63.5%	-	-	-	5.0	59.5	5.8
C1 PRC for Signalled Lanes (%): 36.3 Total Delay for Signalled Lanes (pcuHr): 16.90 Cycle Time (s): 120 PRC Over All Lanes (%): 36.3 Total Delay Over All Lanes(pcuHr): 16.90																		

Basic Results Summary

Scenario 5: 'DN 2032' (FG5: 'YoO+5 DN (2032) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

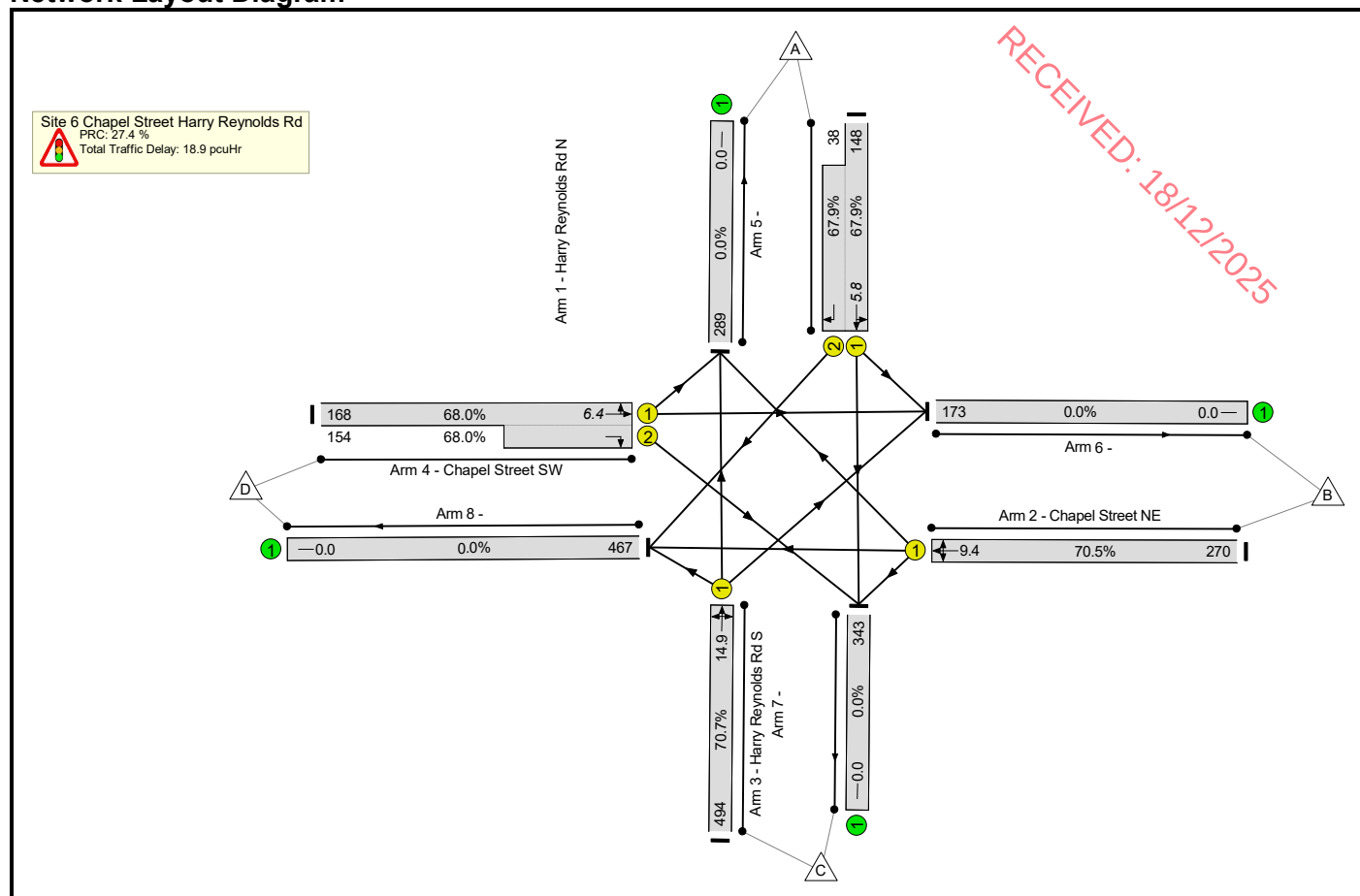
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	74.6%	0	0	0	20.1	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	74.6%	0	0	0	20.1	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	17	-	-	224	1844:1856	277+33	72.3 : 72.3%	-	-	-	4.3	68.5	7.6
2/1	Chapel Street NE Right Left Ahead	U	D		1	13	-	-	150	1777	207	72.4%	-	-	-	3.4	81.2	6.0
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	35	-	-	398	1810	543	73.3%	-	-	-	5.5	49.9	13.2
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	35	-	-	564	1851:1787	421+335	74.6 : 74.6%	-	-	-	6.9	44.1	10.6
C1 PRC for Signalled Lanes (%): 20.7 Total Delay for Signalled Lanes (pcuHr): 20.07 Cycle Time (s): 120 PRC Over All Lanes (%): 20.7 Total Delay Over All Lanes(pcuHr): 20.07																		

Basic Results Summary

Scenario 6: 'DN 2032' (FG6: 'YoO+5 DN (2032) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

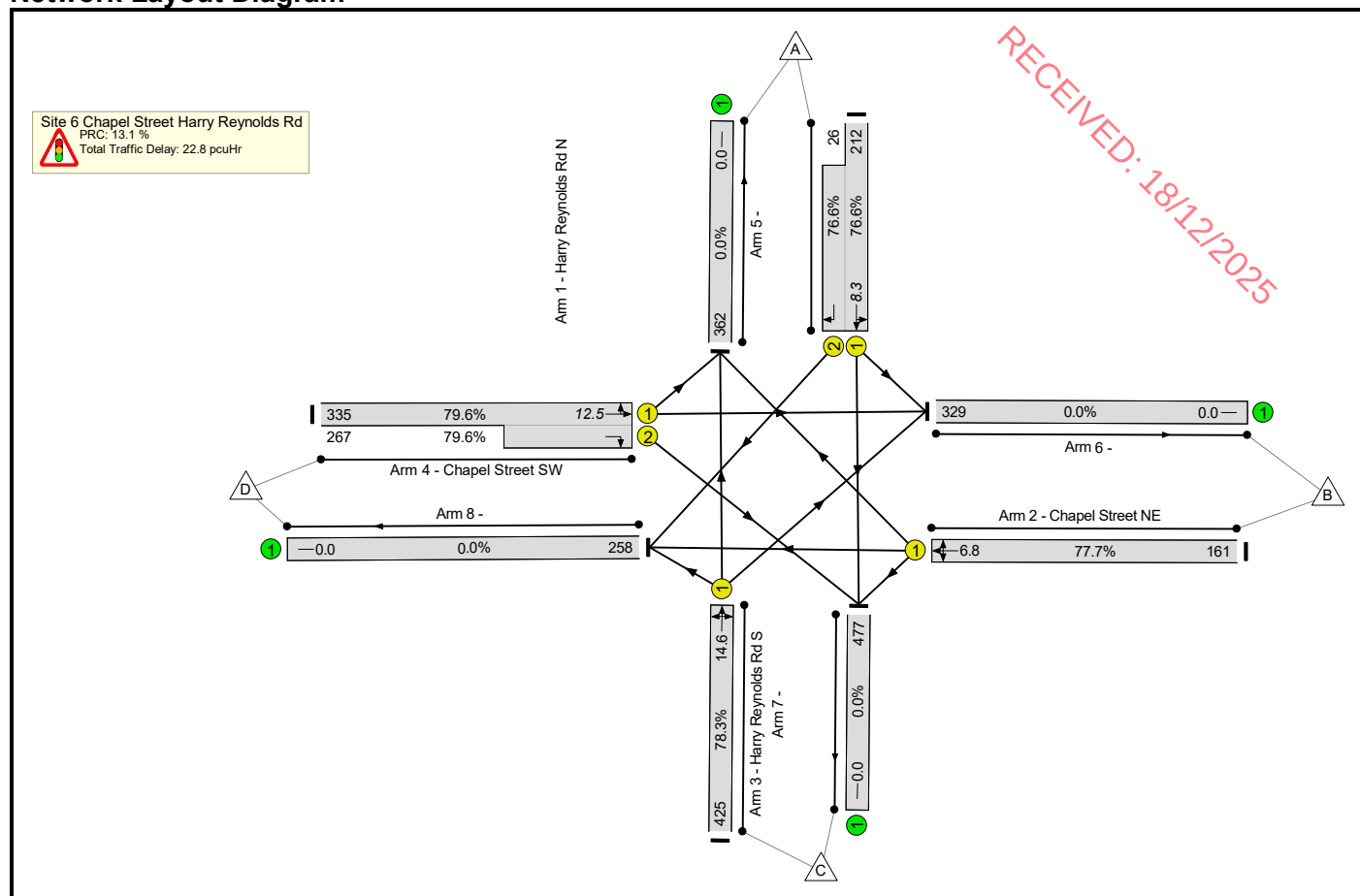
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	70.7%	0	0	0	18.9	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	70.7%	0	0	0	18.9	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	13	-	-	186	1868:1856	218+56	67.9 : 67.9%	-	-	-	3.6	70.2	5.8
2/1	Chapel Street NE Right Left Ahead	U	D		1	25	-	-	270	1768	383	70.5%	-	-	-	4.4	59.1	9.4
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	47	-	-	494	1748	699	70.7%	-	-	-	5.3	38.8	14.9
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	15	-	-	322	1853:1787	247+226	68.0 : 68.0%	-	-	-	5.5	61.2	6.4
C1 PRC for Signalled Lanes (%): 27.4 Total Delay for Signalled Lanes (pcuHr): 18.85 Cycle Time (s): 120 PRC Over All Lanes (%): 27.4 Total Delay Over All Lanes(pcuHr): 18.85																		

Basic Results Summary

Scenario 7: 'DN 2042' (FG7: 'YoO+15 DN (2042) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

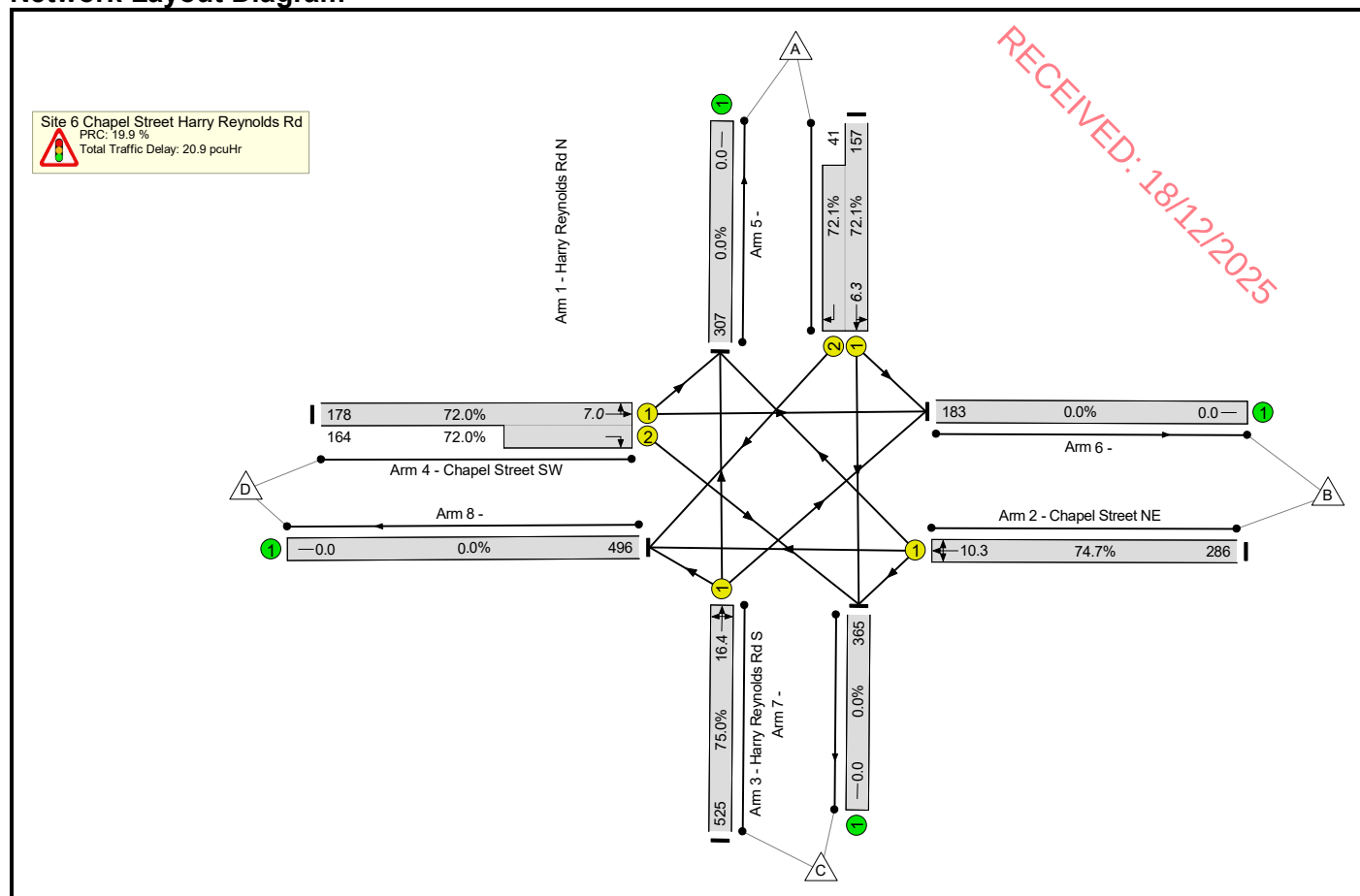
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	79.6%	0	0	0	22.8	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	79.6%	0	0	0	22.8	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	17	-	-	238	1845:1856	277+34	76.6 : 76.6%	-	-	-	4.8	72.2	8.3
2/1	Chapel Street NE Right Left Ahead	U	D		1	13	-	-	161	1777	207	77.7%	-	-	-	3.9	87.8	6.8
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	35	-	-	425	1809	543	78.3%	-	-	-	6.3	53.3	14.6
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	35	-	-	602	1851:1787	421+336	79.6 : 79.6%	-	-	-	7.8	46.9	12.5
C1 PRC for Signalled Lanes (%): 13.1 Total Delay for Signalled Lanes (pcuHr): 22.82 Cycle Time (s): 120 PRC Over All Lanes (%): 13.1 Total Delay Over All Lanes(pcuHr): 22.82																		

Basic Results Summary

Scenario 8: 'DN 2042' (FG8: 'YoO+15 DN (2042) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

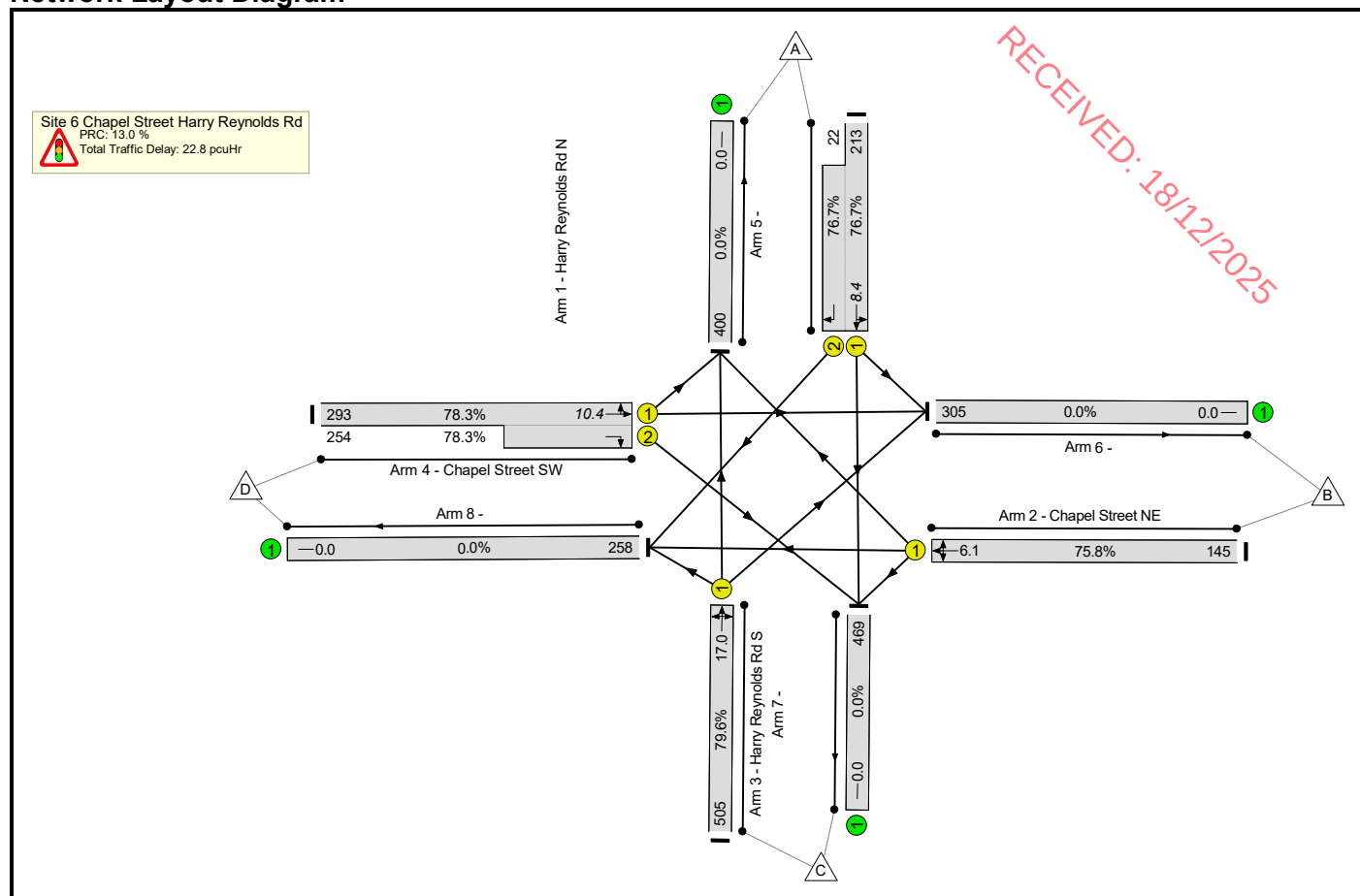
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	75.0%	0	0	0	20.9	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	75.0%	0	0	0	20.9	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	13	-	-	198	1867:1856	218+57	72.1 : 72.1%	-	-	-	4.0	73.2	6.3
2/1	Chapel Street NE Right Left Ahead	U	D		1	25	-	-	286	1767	383	74.7%	-	-	-	4.9	62.0	10.3
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	47	-	-	525	1749	700	75.0%	-	-	-	6.0	41.0	16.4
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	15	-	-	342	1853:1787	247+228	72.0 : 72.0%	-	-	-	6.0	63.1	7.0
C1 PRC for Signalled Lanes (%): 19.9 Total Delay for Signalled Lanes (pcuHr): 20.92 Cycle Time (s): 120 PRC Over All Lanes (%): 19.9 Total Delay Over All Lanes(pcuHr): 20.92																		

Basic Results Summary

Scenario 9: 'DM 2027' (FG9: 'YoO DM (2027) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

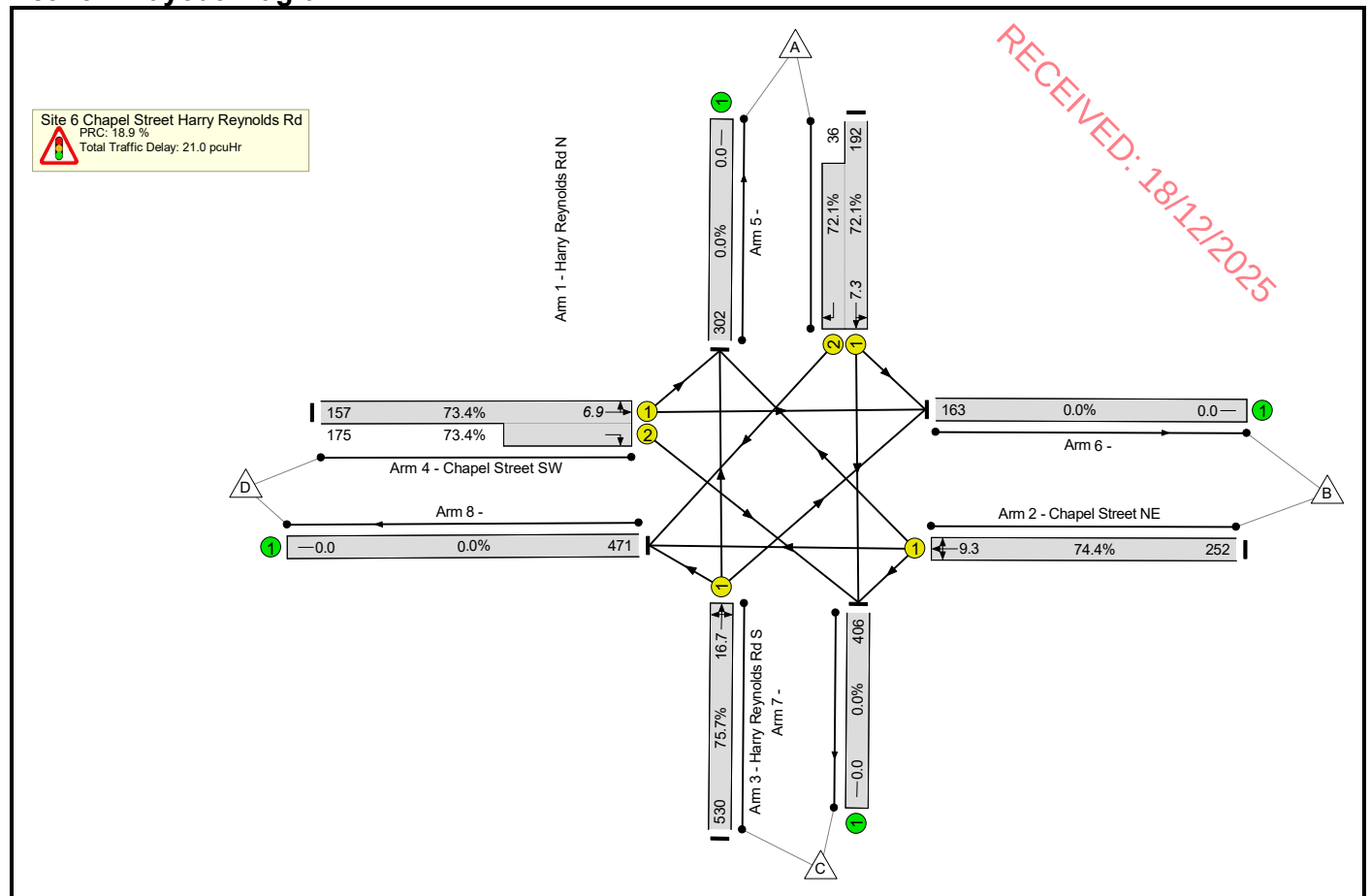
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	79.6%	0	0	0	22.8	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	79.6%	0	0	0	22.8	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	17	-	-	235	1852:1856	278+29	76.7 : 76.7%	-	-	-	4.7	72.6	8.4
2/1	Chapel Street NE Right Left Ahead	U	D		1	12	-	-	145	1766	191	75.8%	-	-	-	3.6	88.5	6.1
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	41	-	-	505	1812	634	79.6%	-	-	-	6.8	48.7	17.0
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	30	-	-	547	1851:1787	374+324	78.3 : 78.3%	-	-	-	7.7	50.5	10.4
C1 PRC for Signalled Lanes (%): 13.0 Total Delay for Signalled Lanes (pcuHr): 22.81 Cycle Time (s): 120 PRC Over All Lanes (%): 13.0 Total Delay Over All Lanes(pcuHr): 22.81																		

Basic Results Summary

Scenario 10: 'DM 2027' (FG10: 'YoO DM (2027) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

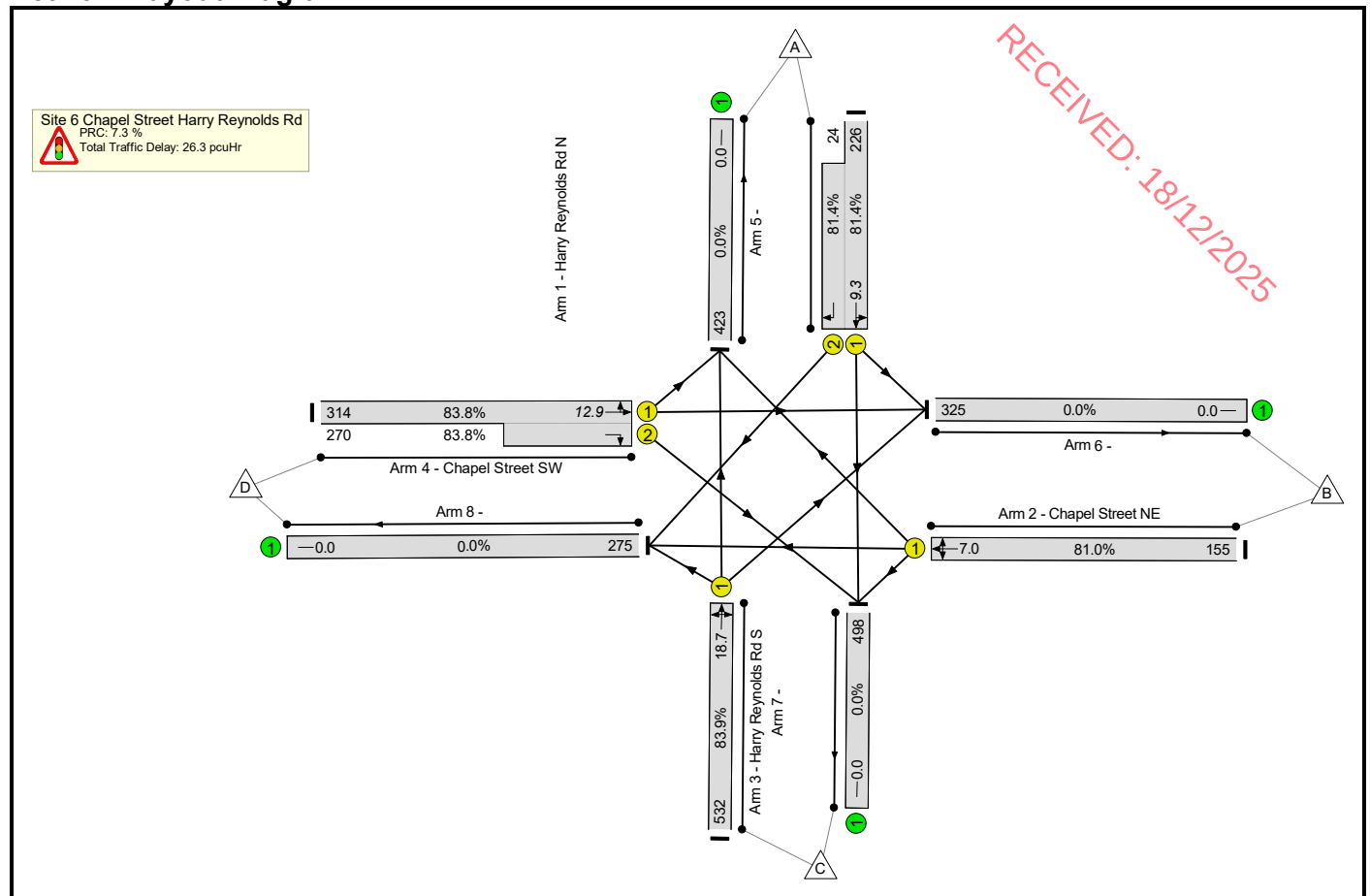
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	75.7%	0	0	0	21.0	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	75.7%	0	0	0	21.0	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	16	-	-	228	1881:1856	266+50	72.1 : 72.1%	-	-	-	4.3	68.4	7.3
2/1	Chapel Street NE Right Left Ahead	U	D		1	22	-	-	252	1767	339	74.4%	-	-	-	4.6	65.8	9.3
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	47	-	-	530	1750	700	75.7%	-	-	-	6.1	41.4	16.7
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	15	-	-	332	1853:1787	214+238	73.4 : 73.4%	-	-	-	5.9	64.3	6.9
C1 PRC for Signalled Lanes (%): 18.9 Total Delay for Signalled Lanes (pcuHr): 20.96 Cycle Time (s): 120 PRC Over All Lanes (%): 18.9 Total Delay Over All Lanes(pcuHr): 20.96																		

Basic Results Summary

Scenario 11: 'DM 2032' (FG11: 'YoO+5 DM (2032) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

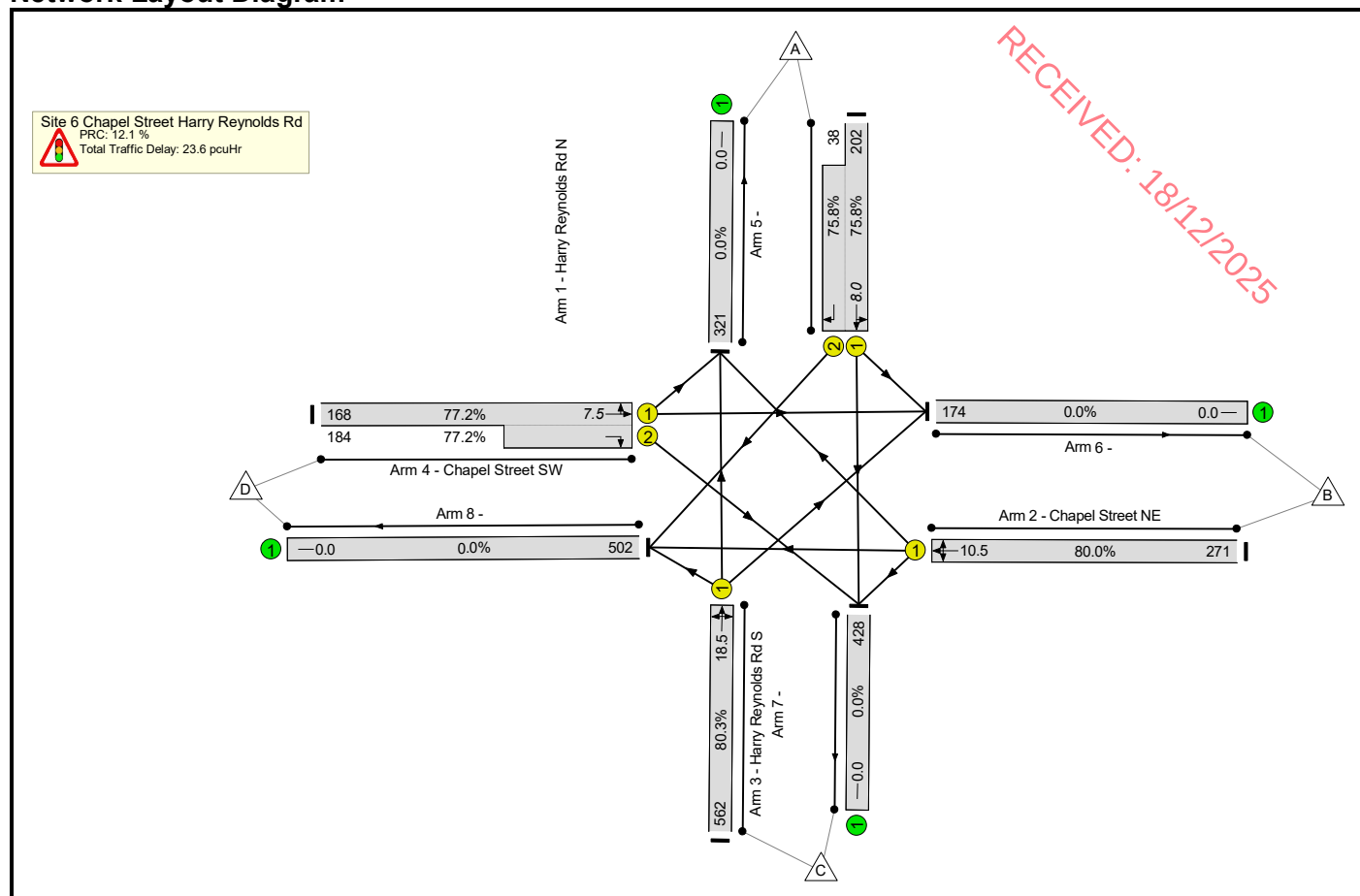
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	83.9%	0	0	0	26.3	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	83.9%	0	0	0	26.3	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	17	-	-	250	1852:1856	278+30	81.4 : 81.4%	-	-	-	5.4	78.2	9.3
2/1	Chapel Street NE Right Left Ahead	U	D		1	12	-	-	155	1766	191	81.0%	-	-	-	4.2	97.1	7.0
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	41	-	-	532	1812	634	83.9%	-	-	-	7.8	52.7	18.7
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	30	-	-	584	1851:1787	375+322	83.8 : 83.8%	-	-	-	8.9	54.8	12.9
C1 PRC for Signalled Lanes (%): 7.3 Total Delay for Signalled Lanes (pcuHr): 26.28 Cycle Time (s): 120 PRC Over All Lanes (%): 7.3 Total Delay Over All Lanes(pcuHr): 26.28																		

Basic Results Summary

Scenario 12: 'DM 2032' (FG12: 'YoO+5 DM (2032) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

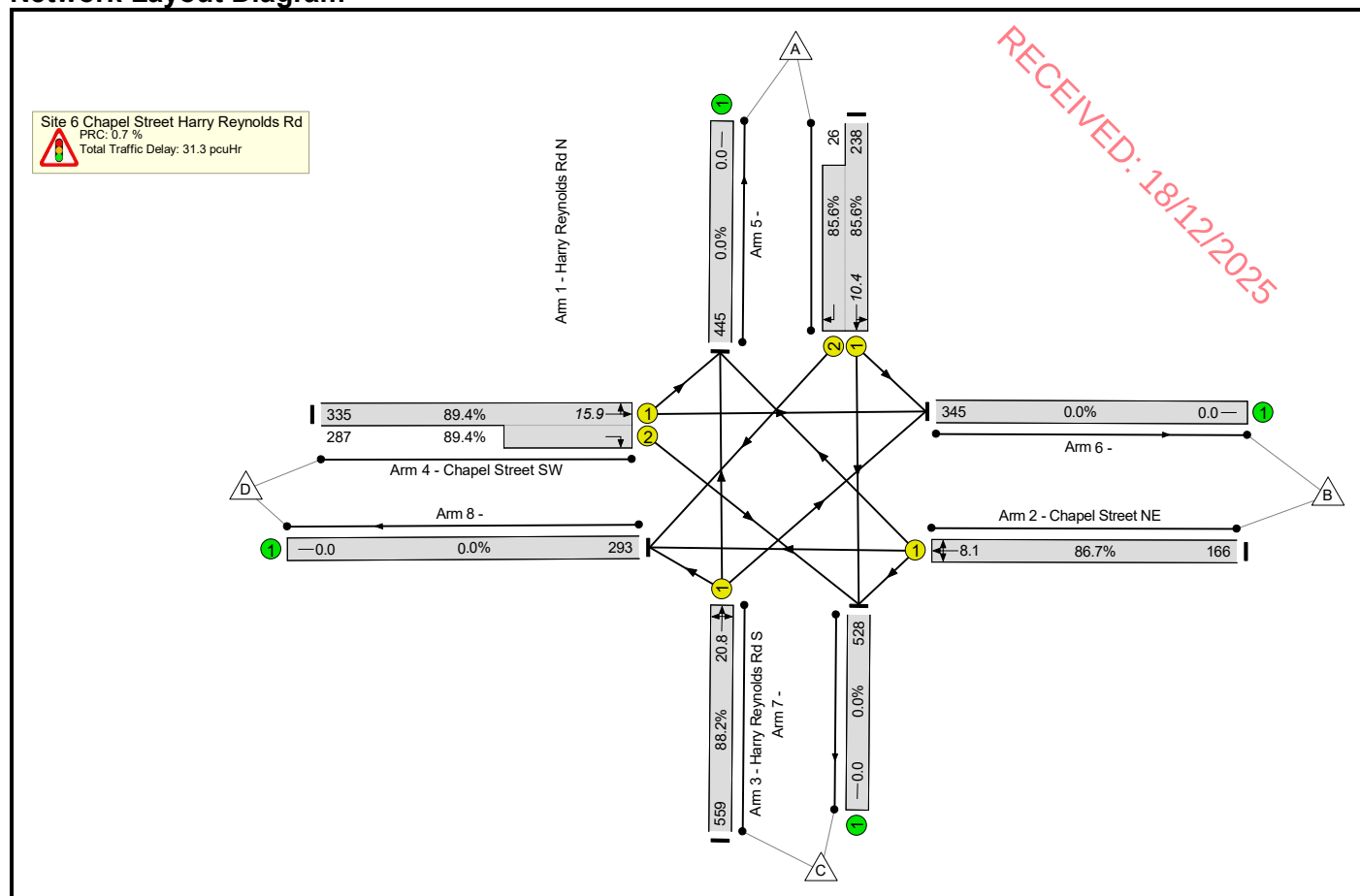
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	80.3%	0	0	0	23.6	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	80.3%	0	0	0	23.6	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	16	-	-	240	1880:1856	266+50	75.8 : 75.8%	-	-	-	4.8	71.5	8.0
2/1	Chapel Street NE Right Left Ahead	U	D		1	22	-	-	271	1767	339	80.0%	-	-	-	5.4	71.5	10.5
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	47	-	-	562	1750	700	80.3%	-	-	-	6.9	44.5	18.5
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	15	-	-	352	1853:1787	218+238	77.2 : 77.2%	-	-	-	6.5	66.7	7.5
C1 PRC for Signalled Lanes (%): 12.1 Total Delay for Signalled Lanes (pcuHr): 23.62 Cycle Time (s): 120 PRC Over All Lanes (%): 12.1 Total Delay Over All Lanes(pcuHr): 23.62																		

Basic Results Summary

Scenario 13: 'DM 2042' (FG13: 'YoO+15 DM (2042) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

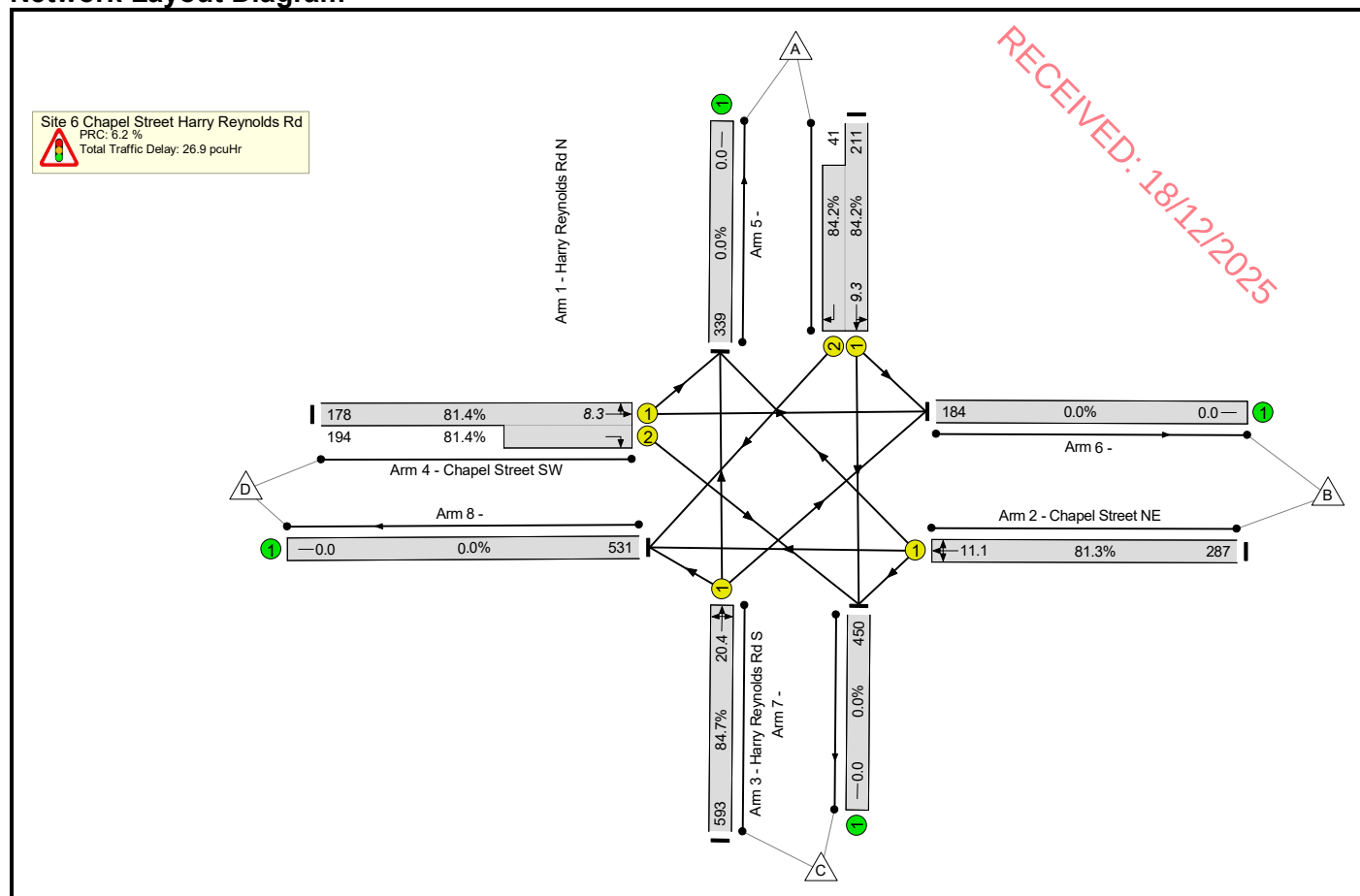
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	89.4%	0	0	0	31.3	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	89.4%	0	0	0	31.3	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	17	-	-	264	1853:1856	278+30	85.6 : 85.6%	-	-	-	6.3	85.4	10.4
2/1	Chapel Street NE Right Left Ahead	U	D		1	12	-	-	166	1767	191	86.7%	-	-	-	5.1	111.1	8.1
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	41	-	-	559	1811	634	88.2%	-	-	-	9.1	58.7	20.8
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	30	-	-	622	1851:1787	375+321	89.4 : 89.4%	-	-	-	10.8	62.3	15.9
C1 PRC for Signalled Lanes (%): 0.7 Total Delay for Signalled Lanes (pcuHr): 31.27 Cycle Time (s): 120 PRC Over All Lanes (%): 0.7 Total Delay Over All Lanes(pcuHr): 31.27																		

Basic Results Summary

Scenario 14: 'DM 2042' (FG14: 'YoO+15 DM (2042) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

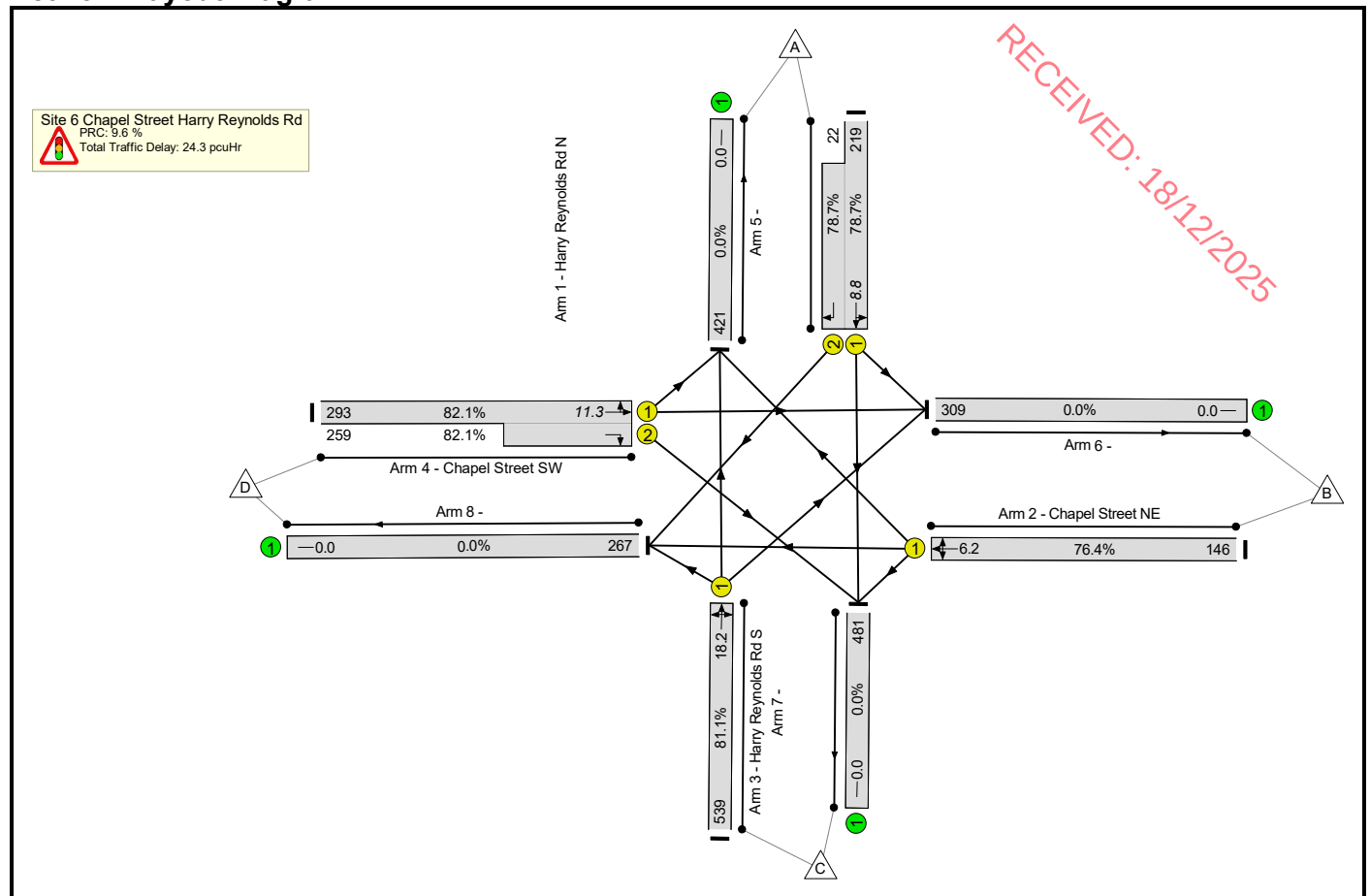
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	84.7%	0	0	0	26.9	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	84.7%	0	0	0	26.9	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	15	-	-	252	1879:1856	251+49	84.2 : 84.2%	-	-	-	5.9	84.6	9.3
2/1	Chapel Street NE Right Left Ahead	U	D		1	23	-	-	287	1766	353	81.3%	-	-	-	5.7	71.5	11.1
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	47	-	-	593	1750	700	84.7%	-	-	-	8.0	48.7	20.4
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	15	-	-	372	1853:1787	219+238	81.4 : 81.4%	-	-	-	7.3	70.4	8.3
C1 PRC for Signalled Lanes (%): 6.2 Total Delay for Signalled Lanes (pcuHr): 26.92 Cycle Time (s): 120 PRC Over All Lanes (%): 6.2 Total Delay Over All Lanes (pcuHr): 26.92																		

Basic Results Summary

Scenario 15: 'DS 2027' (FG15: 'YoO DS (2027) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

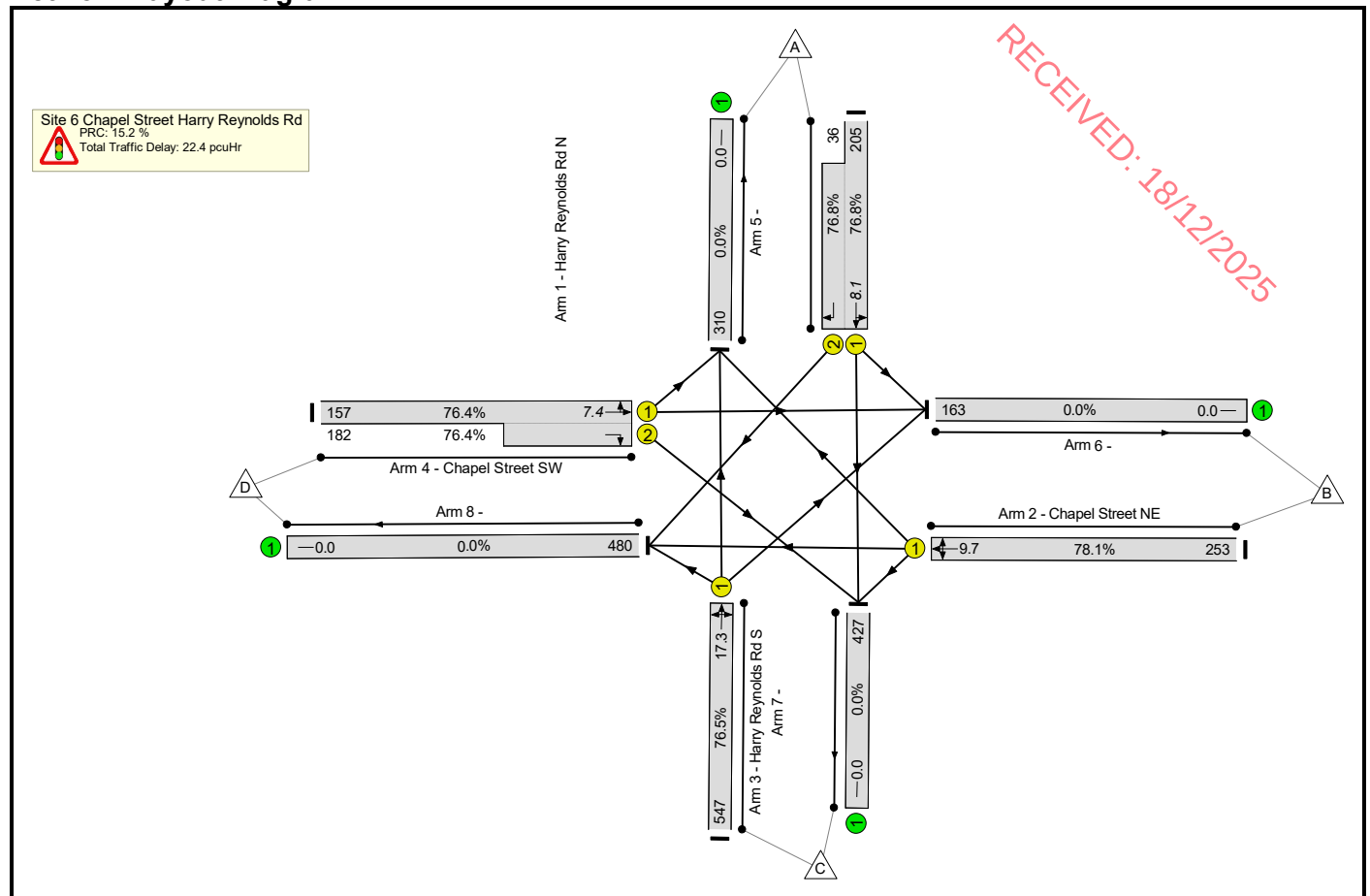
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	82.1%	0	0	0	24.3	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	82.1%	0	0	0	24.3	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	17	-	-	241	1854:1856	278+28	78.7 : 78.7%	-	-	-	5.0	74.9	8.8
2/1	Chapel Street NE Right Left Ahead	U	D		1	12	-	-	146	1764	191	76.4%	-	-	-	3.6	89.4	6.2
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	43	-	-	539	1813	665	81.1%	-	-	-	7.2	48.1	18.2
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	28	-	-	552	1851:1787	357+316	82.1 : 82.1%	-	-	-	8.5	55.1	11.3
C1 PRC for Signalled Lanes (%): 9.6 Total Delay for Signalled Lanes (pcuHr): 24.30 Cycle Time (s): 120 PRC Over All Lanes (%): 9.6 Total Delay Over All Lanes(pcuHr): 24.30																		

Basic Results Summary

Scenario 16: 'DS 2027' (FG16: 'YoO DS (2027) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

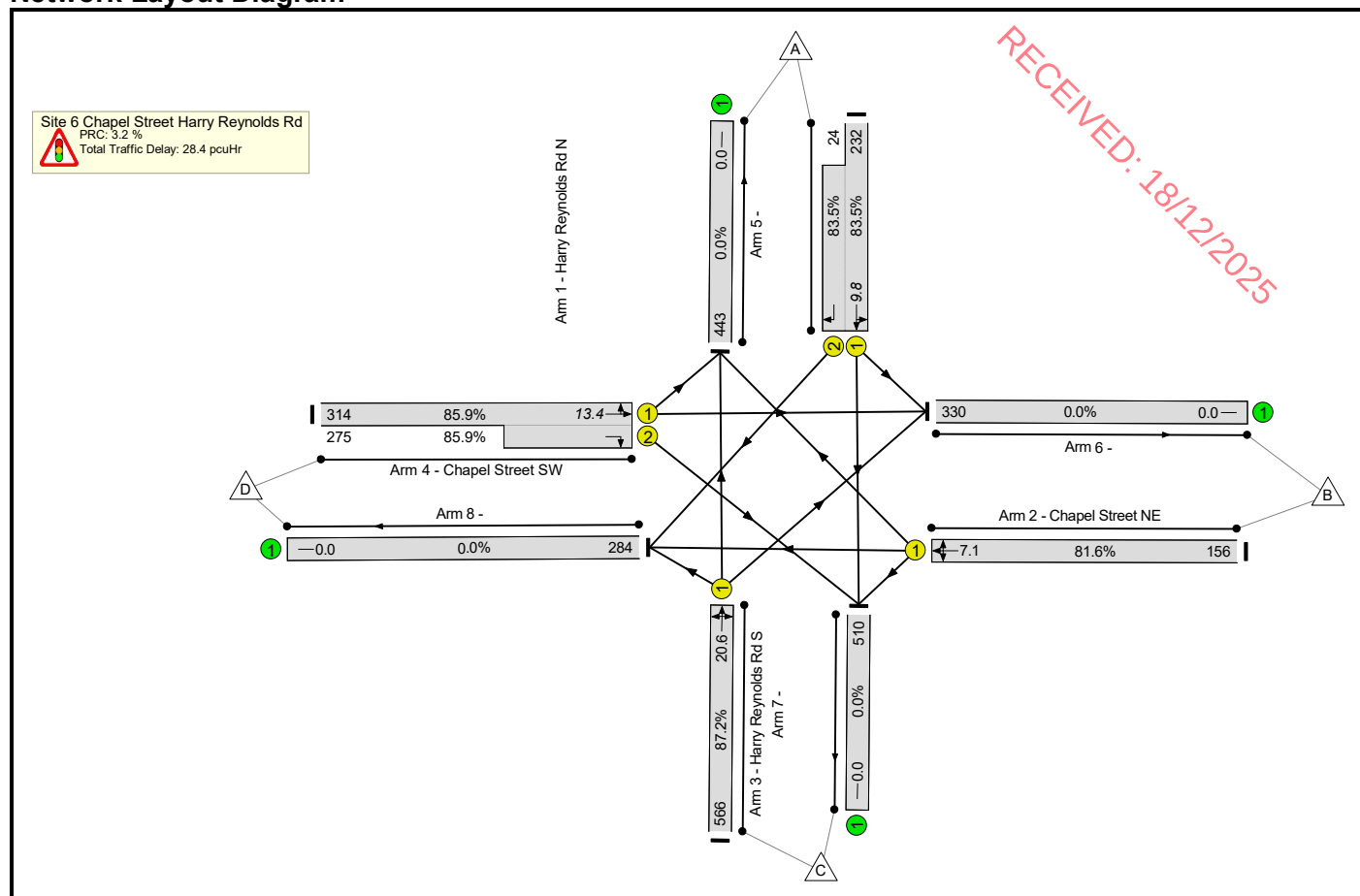
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	78.1%	0	0	0	22.4	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	78.1%	0	0	0	22.4	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	16	-	-	241	1883:1856	267+47	76.8 : 76.8%	-	-	-	4.9	72.7	8.1
2/1	Chapel Street NE Right Left Ahead	U	D		1	21	-	-	253	1766	324	78.1%	-	-	-	5.0	71.0	9.7
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	48	-	-	547	1750	715	76.5%	-	-	-	6.2	41.1	17.3
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	15	-	-	339	1853:1787	206+238	76.4 : 76.4%	-	-	-	6.3	66.4	7.4
C1 PRC for Signalled Lanes (%): 15.2 Total Delay for Signalled Lanes (pcuHr): 22.35 Cycle Time (s): 120 PRC Over All Lanes (%): 15.2 Total Delay Over All Lanes(pcuHr): 22.35																		

Basic Results Summary

Scenario 17: 'DS 2032' (FG17: 'YoO+5 DS (2032) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

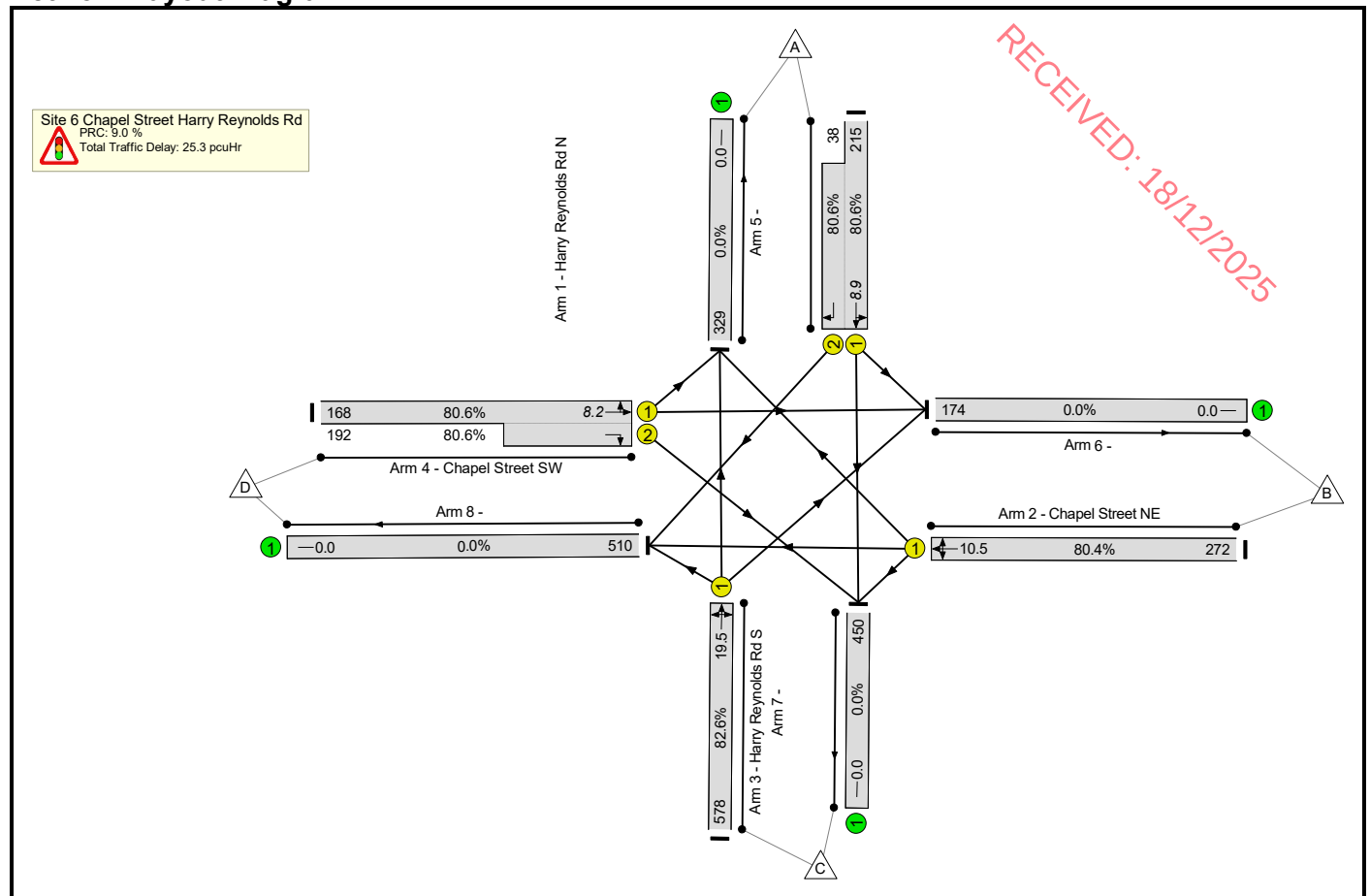
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	87.2%	0	0	0	28.4	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	87.2%	0	0	0	28.4	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	17	-	-	256	1853:1856	278+29	83.5 : 83.5%	-	-	-	5.8	81.6	9.8
2/1	Chapel Street NE Right Left Ahead	U	D		1	12	-	-	156	1764	191	81.6%	-	-	-	4.3	98.4	7.1
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	42	-	-	566	1812	649	87.2%	-	-	-	8.8	56.0	20.6
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	29	-	-	589	1851:1787	365+320	85.9 : 85.9%	-	-	-	9.5	58.0	13.4
C1 PRC for Signalled Lanes (%): 3.2 Total Delay for Signalled Lanes (pcuHr): 28.36 Cycle Time (s): 120 PRC Over All Lanes (%): 3.2 Total Delay Over All Lanes(pcuHr): 28.36																		

Basic Results Summary

Scenario 18: 'DS 2032' (FG18: 'YoO+5 DS (2032) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

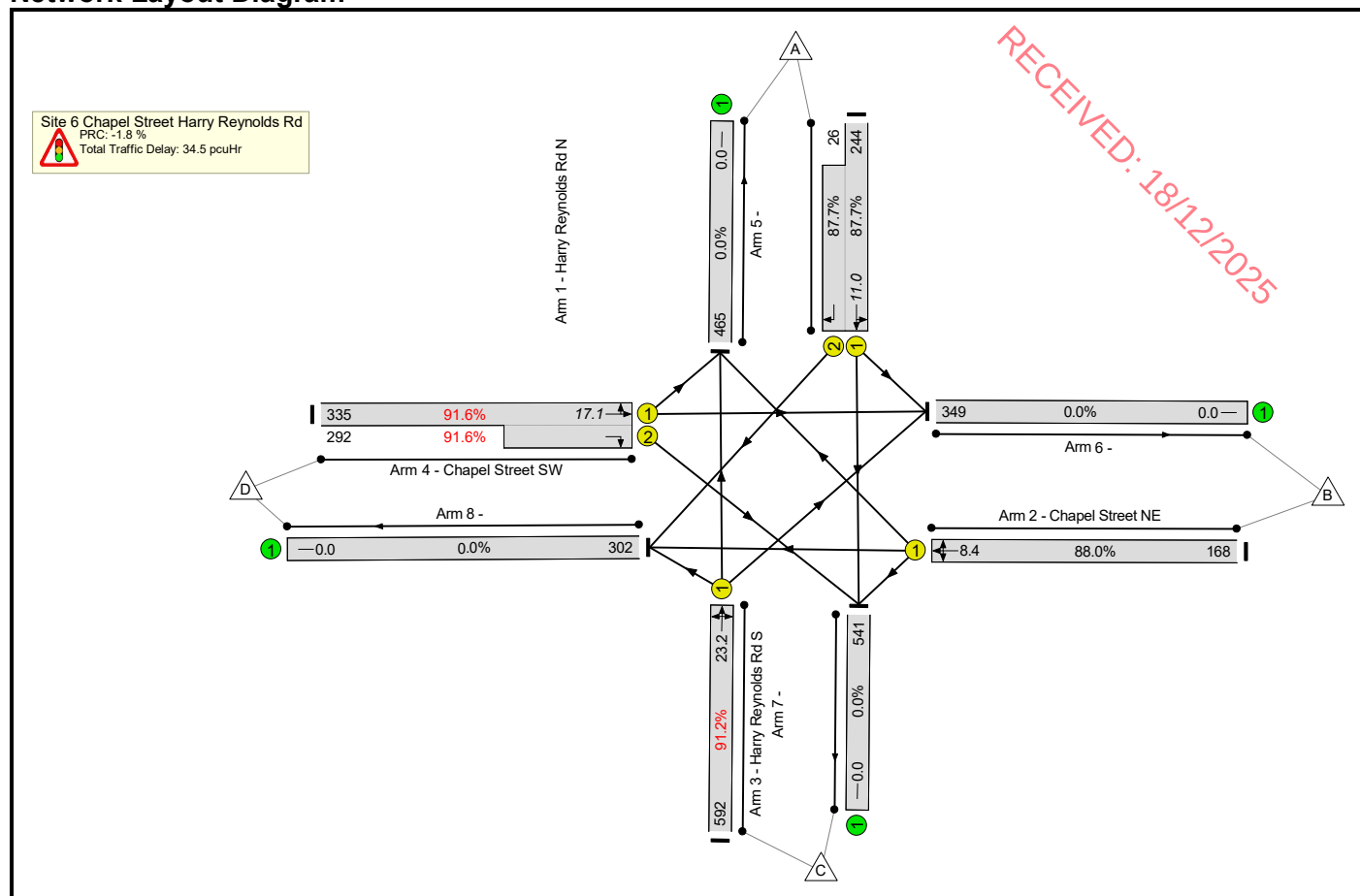
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	82.6%	0	0	0	25.3	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	82.6%	0	0	0	25.3	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	16	-	-	253	1882:1856	267+47	80.6 : 80.6%	-	-	-	5.4	77.0	8.9
2/1	Chapel Street NE Right Left Ahead	U	D		1	22	-	-	272	1766	338	80.4%	-	-	-	5.4	71.9	10.5
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	47	-	-	578	1750	700	82.6%	-	-	-	7.5	46.5	19.5
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	15	-	-	360	1853:1787	208+238	80.6 : 80.6%	-	-	-	7.0	69.9	8.2
C1 PRC for Signalled Lanes (%): 9.0 Total Delay for Signalled Lanes (pcuHr): 25.30 Cycle Time (s): 120 PRC Over All Lanes (%): 9.0 Total Delay Over All Lanes(pcuHr): 25.30																		

Basic Results Summary

Scenario 19: 'DS 2042' (FG19: 'YoO+15 DS (2042) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

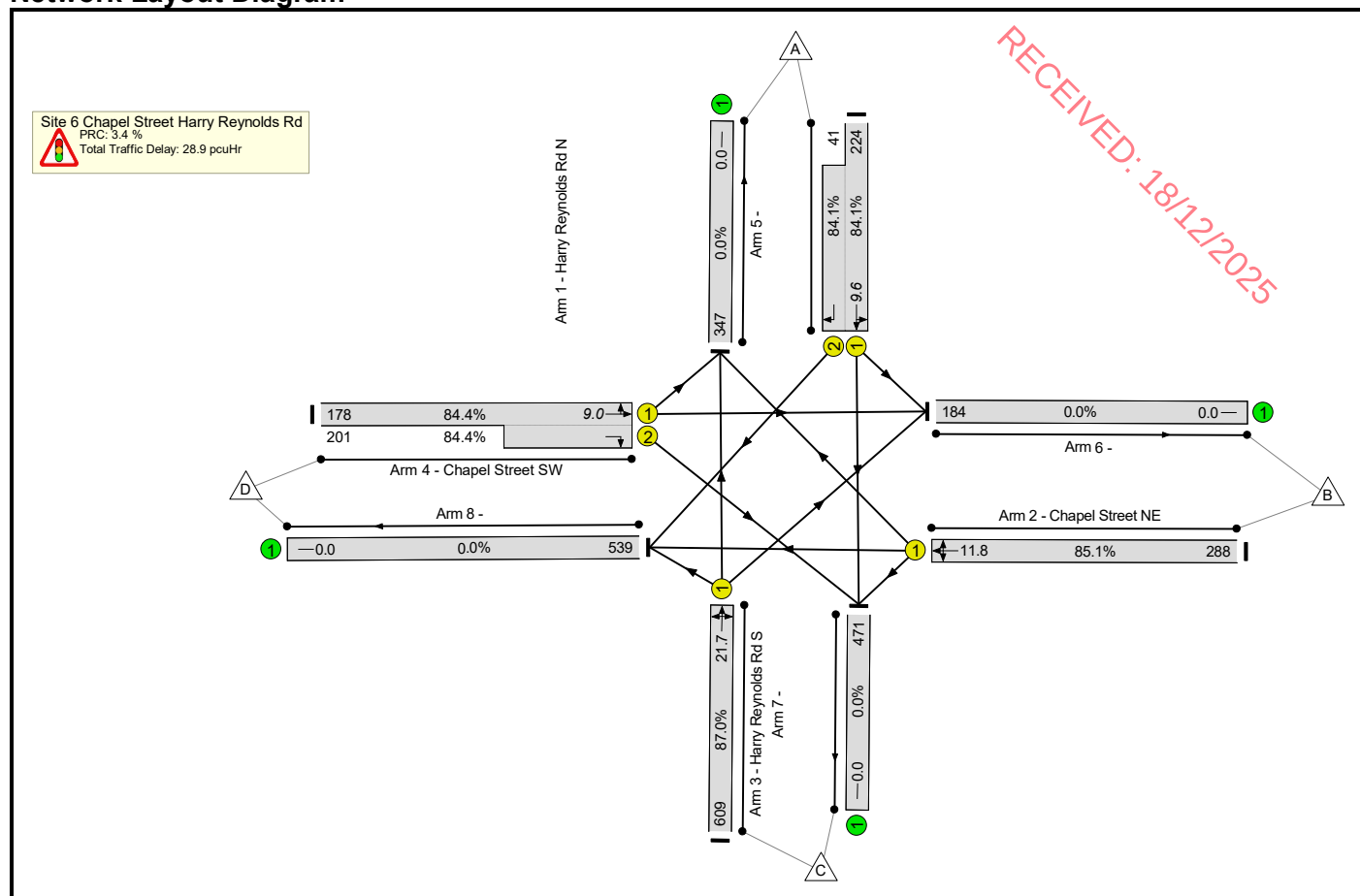
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	91.6%	0	0	0	34.5	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	91.6%	0	0	0	34.5	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	17	-	-	270	1854:1856	278+30	87.7 : 87.7%	-	-	-	6.8	90.4	11.0
2/1	Chapel Street NE Right Left Ahead	U	D		1	12	-	-	168	1763	191	88.0%	-	-	-	5.4	115.2	8.4
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	42	-	-	592	1811	649	91.2%	-	-	-	10.5	64.0	23.2
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	29	-	-	627	1851:1787	366+319	91.6 : 91.6%	-	-	-	11.9	68.1	17.1
C1 PRC for Signalled Lanes (%): -1.8 Total Delay for Signalled Lanes (pcuHr): 34.54 Cycle Time (s): 120 PRC Over All Lanes (%): -1.8 Total Delay Over All Lanes(pcuHr): 34.54																		

Basic Results Summary

Scenario 20: 'DS 2042' (FG20: 'YoO+15 DS (2042) PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	87.0%	0	0	0	28.9	-	-
Site 6 Chapel Street Harry Reynolds Rd	-	-	-		-	-	-	-	-	-	-	87.0%	0	0	0	28.9	-	-
1/1+1/2	Harry Reynolds Rd N Left Ahead Right	U	B		1	16	-	-	265	1881:1856	266+49	84.1 : 84.1%	-	-	-	6.0	82.1	9.6
2/1	Chapel Street NE Right Left Ahead	U	D		1	22	-	-	288	1765	338	85.1%	-	-	-	6.3	79.3	11.8
3/1	Harry Reynolds Rd S Ahead Right Left	U	A		1	47	-	-	609	1750	700	87.0%	-	-	-	8.7	51.6	21.7
4/1+4/2	Chapel Street SW Left Ahead Right	U	C		1	15	-	-	379	1853:1787	211+238	84.4 : 84.4%	-	-	-	7.8	74.3	9.0
C1 PRC for Signalled Lanes (%): 3.4 Total Delay for Signalled Lanes (pcuHr): 28.94 Cycle Time (s): 120 PRC Over All Lanes (%): 3.4 Total Delay Over All Lanes(pcuHr): 28.94																		

J7 - R122 / R132 Junction Modelling Report

RECEIVED: 18/12/2025

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	SITE7R~1.lsg3x
Author:	
Company:	
Address:	
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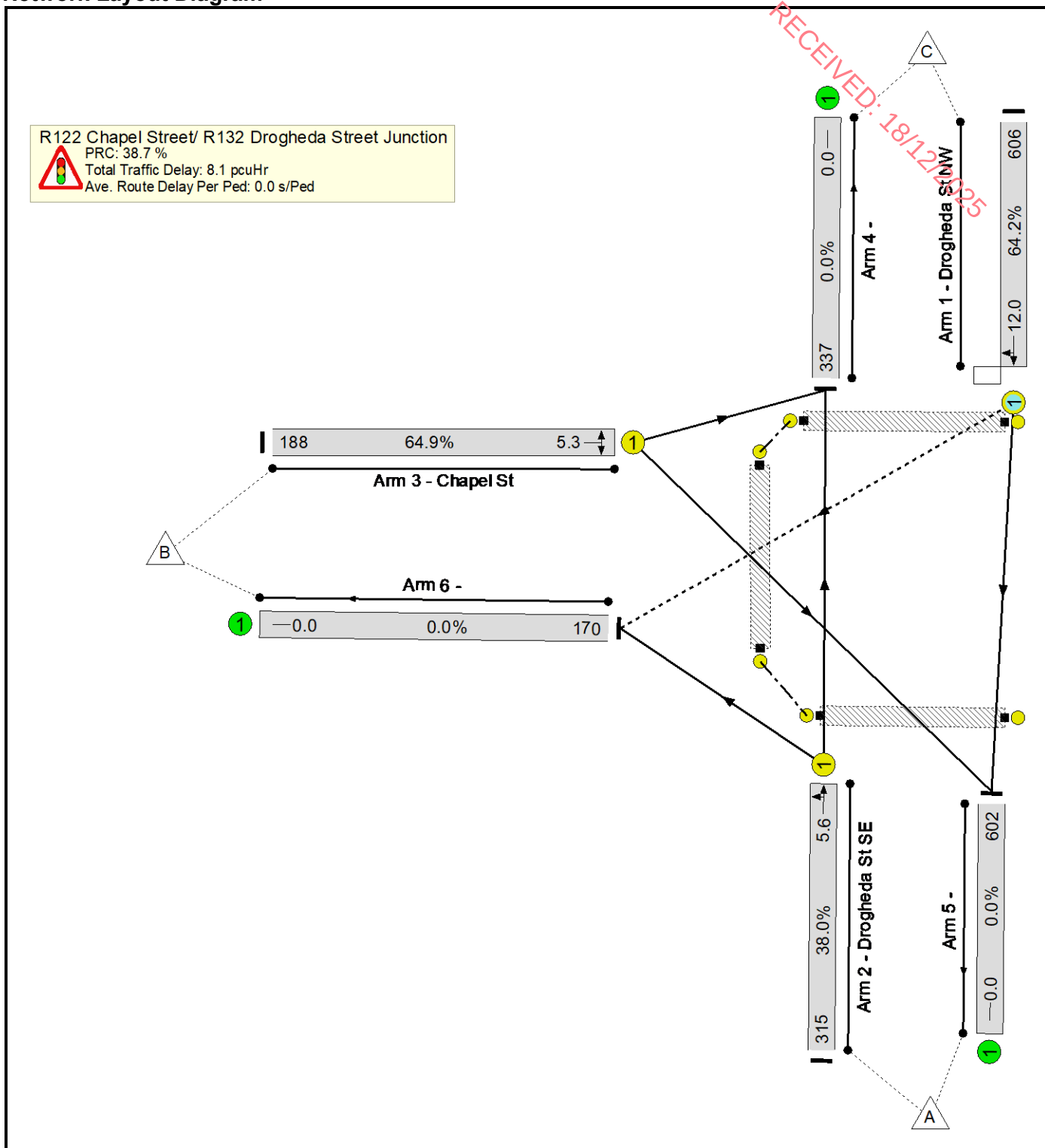
RECEIVED: 18/12/2025

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	Base 2025	Base (2025) AM	Network Control Plan 1	08:00 - 09:00	90	38.7	8.08
2	Base 2025	Base (2025) PM	Network Control Plan 1	16:45 - 17:45	90	51.5	8.27
3	DN 2027	YoO DN (2027) AM	Network Control Plan 1	08:00 - 09:00	90	33.8	8.61
4	DN 2027	YoO DN (2027) PM	Network Control Plan 1	16:45 - 17:45	90	42.9	8.83
5	DN 2032	YoO DN (2032) AM	Network Control Plan 1	08:00 - 09:00	90	20.4	10.25
6	DN 2032	YoO DN (2032) PM	Network Control Plan 1	16:45 - 17:45	90	31.1	9.89
7	DN 2042	YoO DN (2042) AM	Network Control Plan 1	08:00 - 09:00	90	10.4	12.05
8	DN 2042	YoO DN (2042) PM	Network Control Plan 1	16:45 - 17:45	90	22.5	11.25
9	DM 2027	YoO DM (2027) AM	Network Control Plan 1	08:00 - 09:00	90	12.6	12.42
10	DM 2027	YoO DM (2027) PM	Network Control Plan 1	16:45 - 17:45	90	23.6	11.02
11	DM 2032	YoO+5 DM (2032) AM	Network Control Plan 1	08:00 - 09:00	90	3.7	15.26
12	DM 2032	YoO+5 DM (2032) PM	Network Control Plan 1	16:45 - 17:45	90	15.2	12.72
13	DM 2042	YoO+15 DM (2042) AM	Network Control Plan 1	08:00 - 09:00	90	-3.5	20.17
14	DM 2042	YoO+15 DM (2042) PM	Network Control Plan 1	16:45 - 17:45	90	5.8	15.00
15	DS 2027	YoO DS (2027) AM	Network Control Plan 1	08:00 - 09:00	90	7.0	13.94
16	DS 2027	YoO DS (2027) PM	Network Control Plan 1	16:45 - 17:45	90	20.1	11.81
17	DS 2032	YoO+5 DS (2032) AM	Network Control Plan 1	08:00 - 09:00	90	-0.4	18.13
18	DS 2032	YoO+5 DS (2032) PM	Network Control Plan 1	16:45 - 17:45	90	9.8	13.79
19	DS 2042	YoO+15 DS (2042) AM	Network Control Plan 1	08:00 - 09:00	90	-8.8	26.75
20	DS 2042	YoO+15 DS (2042) PM	Network Control Plan 1	16:45 - 17:45	90	2.5	16.59

Scenario 1: 'Base 2025' (FG13: 'Base (2025) AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

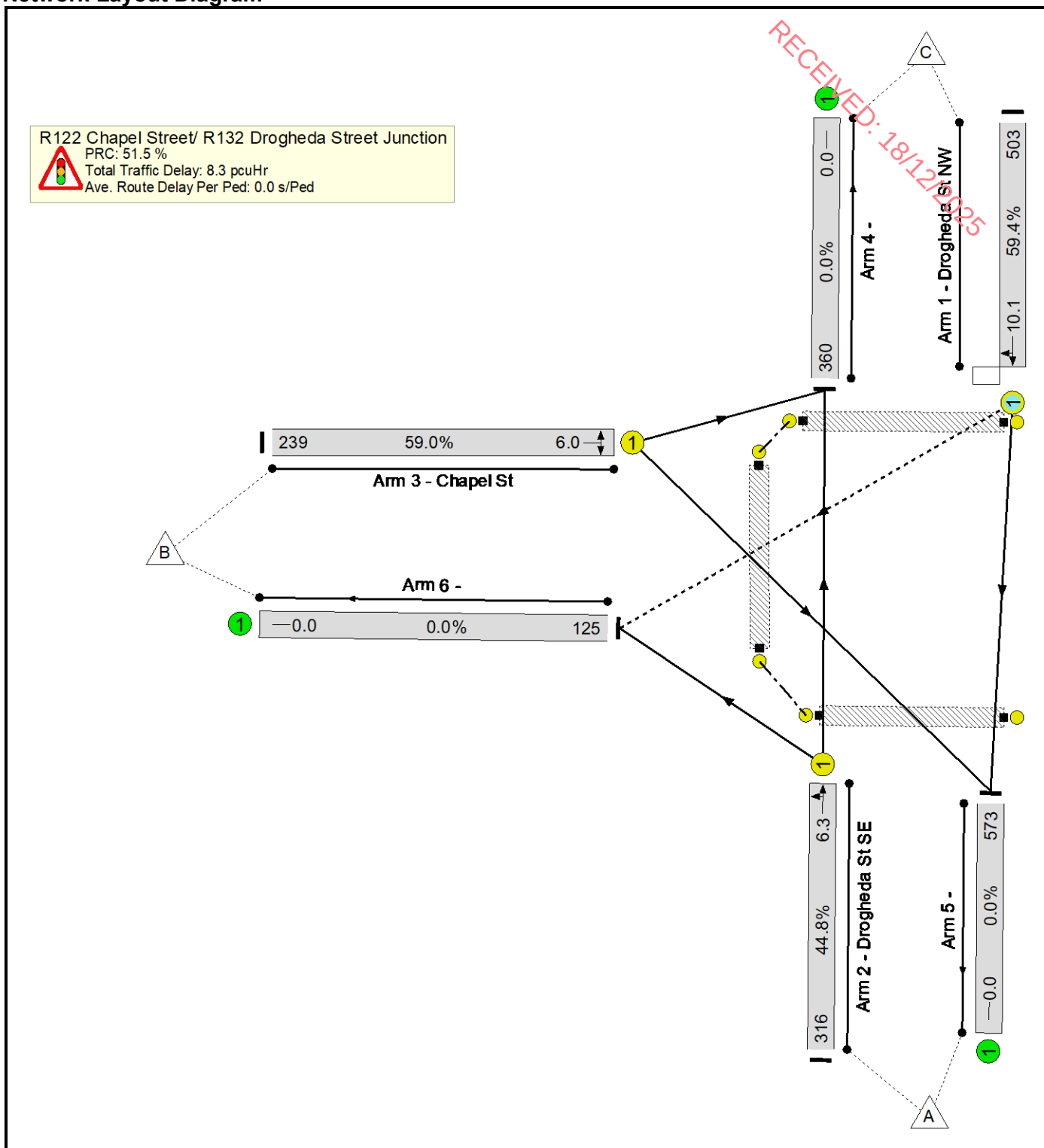


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	64.9%	117	10	1	8.1	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	64.9%	117	10	1	8.1	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	48	4	-	606	1886	944	64.2%	117	10	1	3.6	21.2	12.0
2/1	Drogheda St SE Ahead Left	U	B		1	39	-	-	315	1865	829	38.0%	-	-	-	1.8	20.2	5.6
3/1	Chapel St Left Right	U	C		1	14	-	-	188	1738	290	64.9%	-	-	-	2.7	52.4	5.3
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 38.7 Total Delay for Signalled Lanes (pcuHr): 8.08 Cycle Time (s): 90 PRC Over All Lanes (%): 38.7 Total Delay Over All Lanes(pcuHr): 8.08																		

Network Layout Diagram

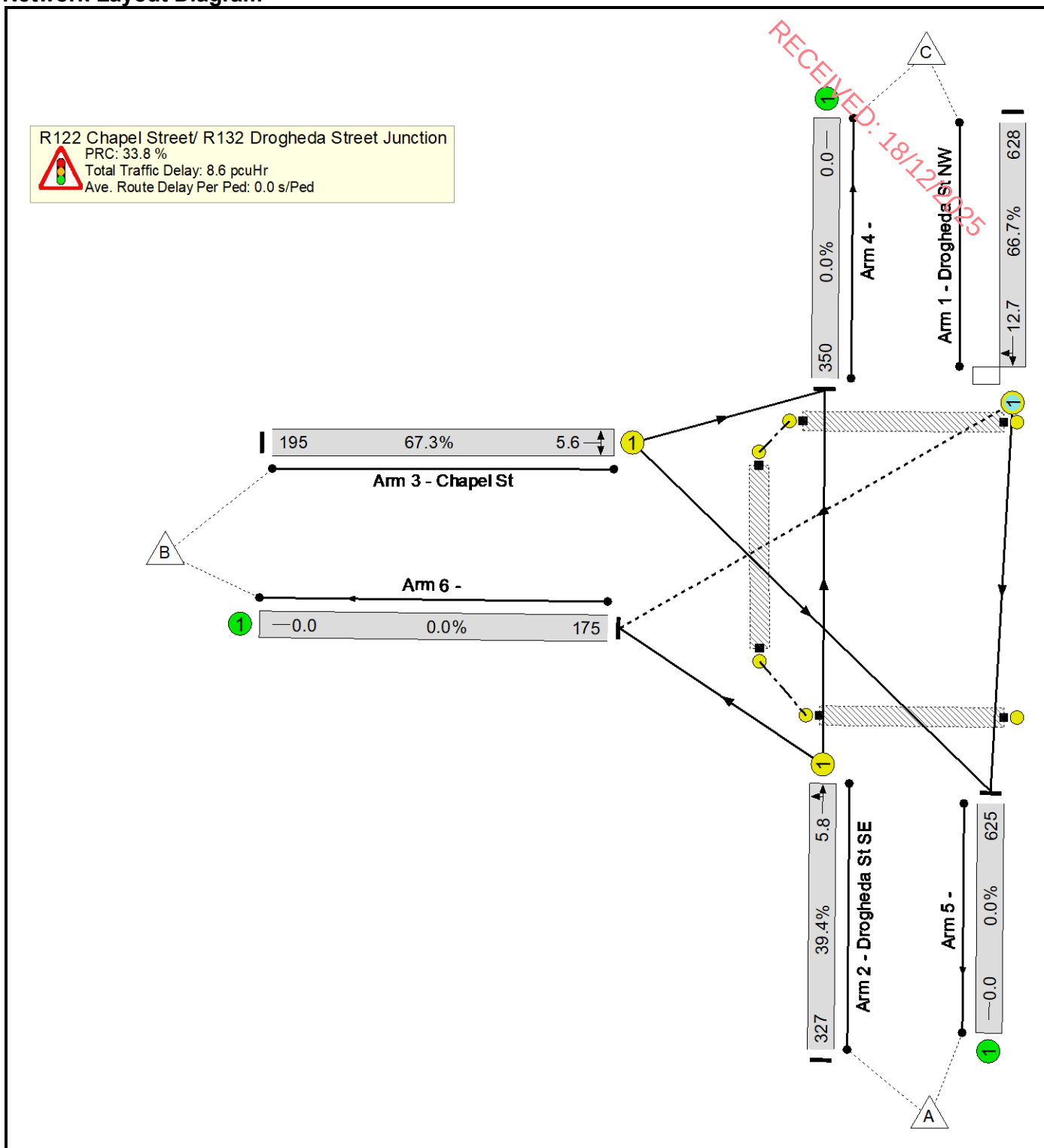


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	59.4%	77	7	1	8.3	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	59.4%	77	7	1	8.3	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	42	4	-	503	1894	847	59.4%	77	7	1	3.3	23.4	10.1
2/1	Drogheda St SE Ahead Left	U	B		1	33	-	-	316	1867	705	44.8%	-	-	-	2.2	25.6	6.3
3/1	Chapel St Left Right	U	C		1	20	-	-	239	1737	405	59.0%	-	-	-	2.7	41.4	6.0
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 51.5 Total Delay for Signalled Lanes (pcuHr): 8.27 Cycle Time (s): 90 PRC Over All Lanes (%): 51.5 Total Delay Over All Lanes(pcuHr): 8.27																		

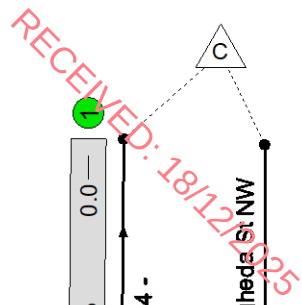
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	67.3%	120	10	1	8.6	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	67.3%	120	10	1	8.6	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	48	4	-	628	1886	942	66.7%	120	10	1	3.8	22.0	12.7
2/1	Drogheda St SE Ahead Left	U	B		1	39	-	-	327	1866	829	39.4%	-	-	-	1.9	20.4	5.8
3/1	Chapel St Left Right	U	C		1	14	-	-	195	1739	290	67.3%	-	-	-	2.9	53.8	5.6
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 33.8 Total Delay for Signalled Lanes (pcuHr): 8.61 Cycle Time (s): 90 PRC Over All Lanes (%): 33.8 Total Delay Over All Lanes(pcuHr): 8.61																		

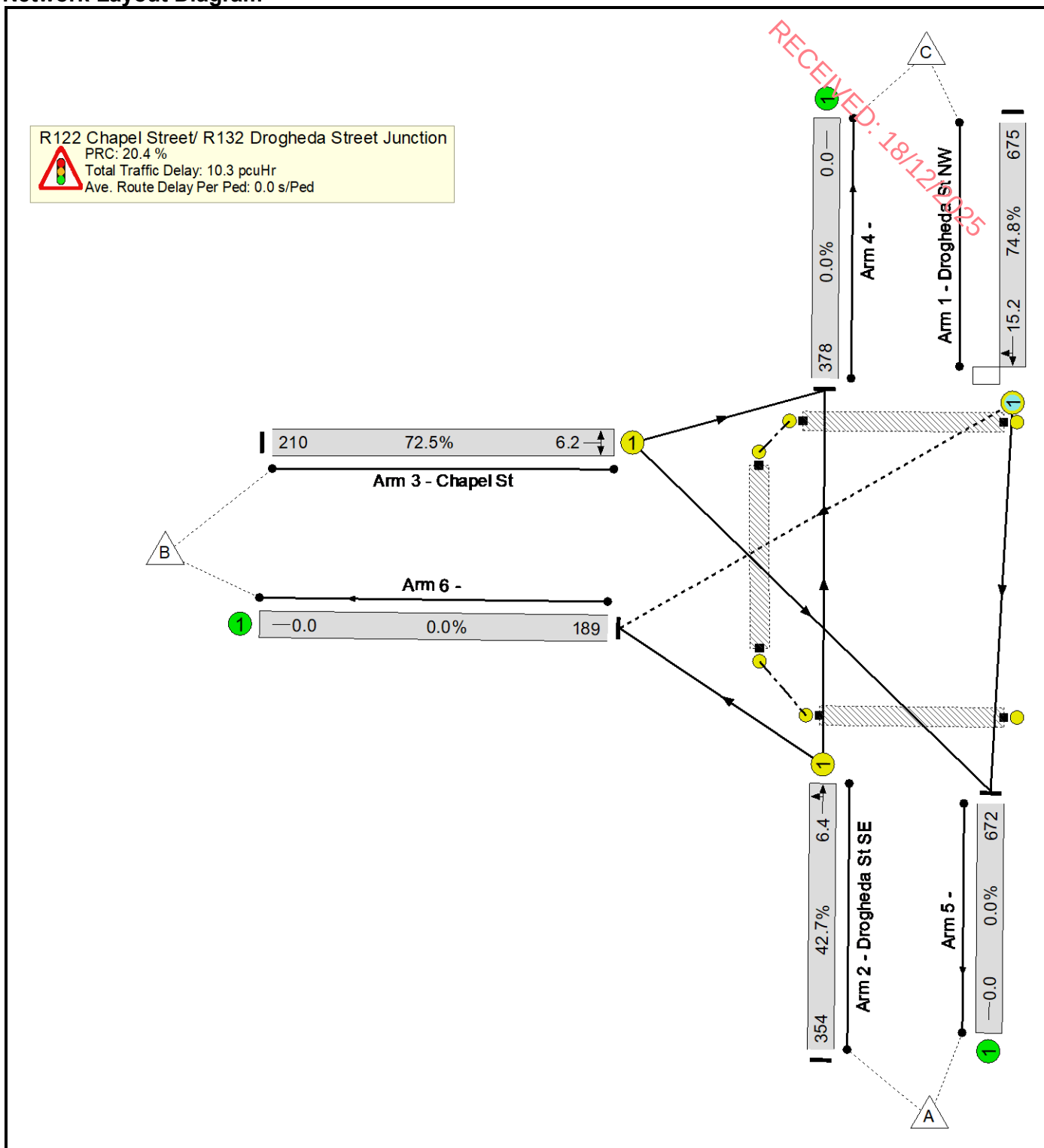


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	63.0%	79	7	1	8.8	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	63.0%	79	7	1	8.8	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	42	4	-	522	1894	829	63.0%	79	7	1	3.6	24.6	10.9
2/1	Drogheda St SE Ahead Left	U	B		1	33	-	-	328	1866	705	46.5%	-	-	-	2.4	25.9	6.5
3/1	Chapel St Left Right	U	C		1	20	-	-	248	1737	405	61.2%	-	-	-	2.9	42.2	6.3
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1																		
PRC for Signalled Lanes (%):							42.9		Total Delay for Signalled Lanes (pcuHr):				8.83		Cycle Time (s): 90			
PRC Over All Lanes (%):							42.9		Total Delay Over All Lanes(pcuHr):				8.83					

Network Layout Diagram

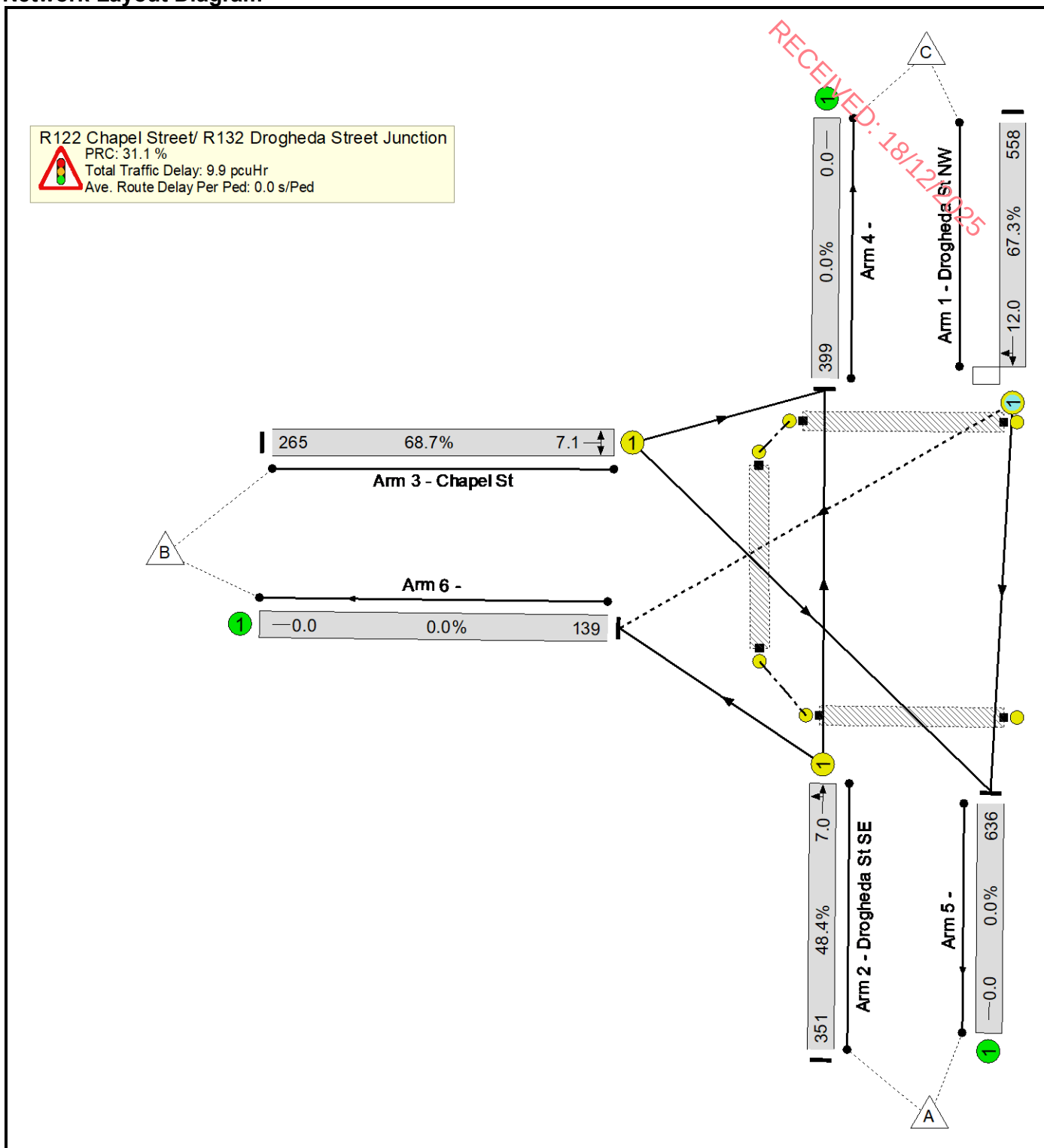


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	74.8%	129	11	2	10.3	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	74.8%	129	11	2	10.3	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	48	4	-	675	1886	903	74.8%	129	11	2	4.8	25.8	15.2
2/1	Drogheda St SE Ahead Left	U	B		1	39	-	-	354	1866	829	42.7%	-	-	-	2.1	20.9	6.4
3/1	Chapel St Left Right	U	C		1	14	-	-	210	1739	290	72.5%	-	-	-	3.3	57.4	6.2
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 20.4 Total Delay for Signalled Lanes (pcuHr): 10.25 Cycle Time (s): 90 PRC Over All Lanes (%): 20.4 Total Delay Over All Lanes(pcuHr): 10.25																		

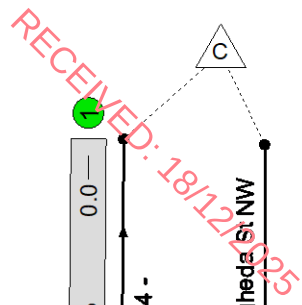
Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	68.7%	85	7	1	9.9	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	68.7%	85	7	1	9.9	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	43	4	-	558	1894	829	67.3%	85	7	1	4.0	25.6	12.0
2/1	Drogheda St SE Ahead Left	U	B		1	34	-	-	351	1866	726	48.4%	-	-	-	2.5	25.5	7.0
3/1	Chapel St Left Right	U	C		1	19	-	-	265	1737	386	68.7%	-	-	-	3.4	46.7	7.1
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 31.1 PRC Over All Lanes (%): 31.1 Total Delay for Signalled Lanes (pcuHr): 9.89 Total Delay Over All Lanes(pcuHr): 9.89 Cycle Time (s): 90																		

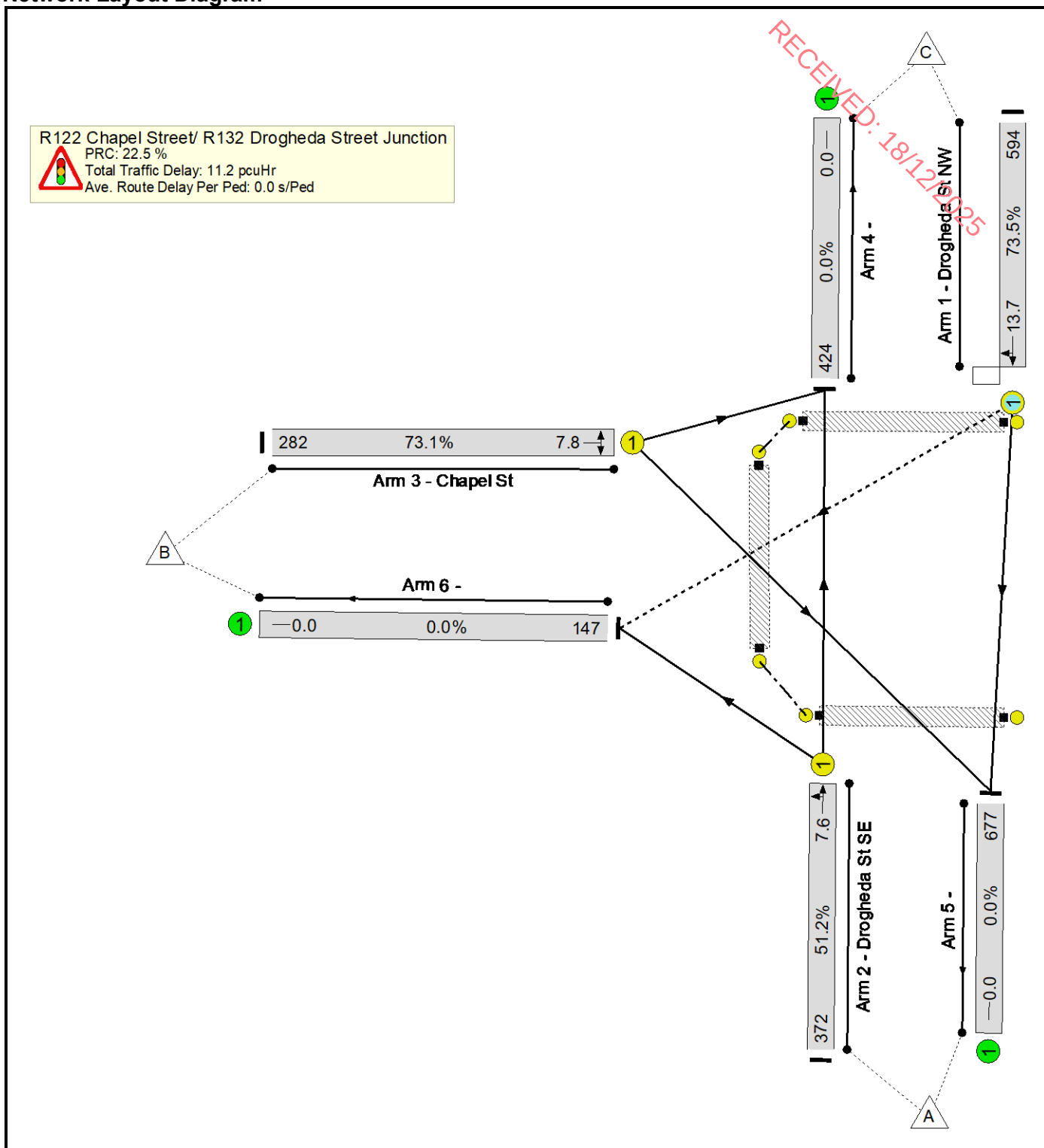


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	81.5%	138	12	2	12.1	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	81.5%	138	12	2	12.1	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	48	4	-	719	1886	882	81.5%	138	12	2	6.0	30.2	17.5
2/1	Drogheda St SE Ahead Left	U	B		1	39	-	-	378	1867	830	45.6%	-	-	-	2.2	21.4	6.9
3/1	Chapel St Left Right	U	C		1	14	-	-	222	1739	290	76.6%	-	-	-	3.8	61.2	6.8
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 10.4 Total Delay for Signalled Lanes (pcuHr): 12.05 Cycle Time (s): 90 PRC Over All Lanes (%): 10.4 Total Delay Over All Lanes(pcuHr): 12.05																		

Network Layout Diagram

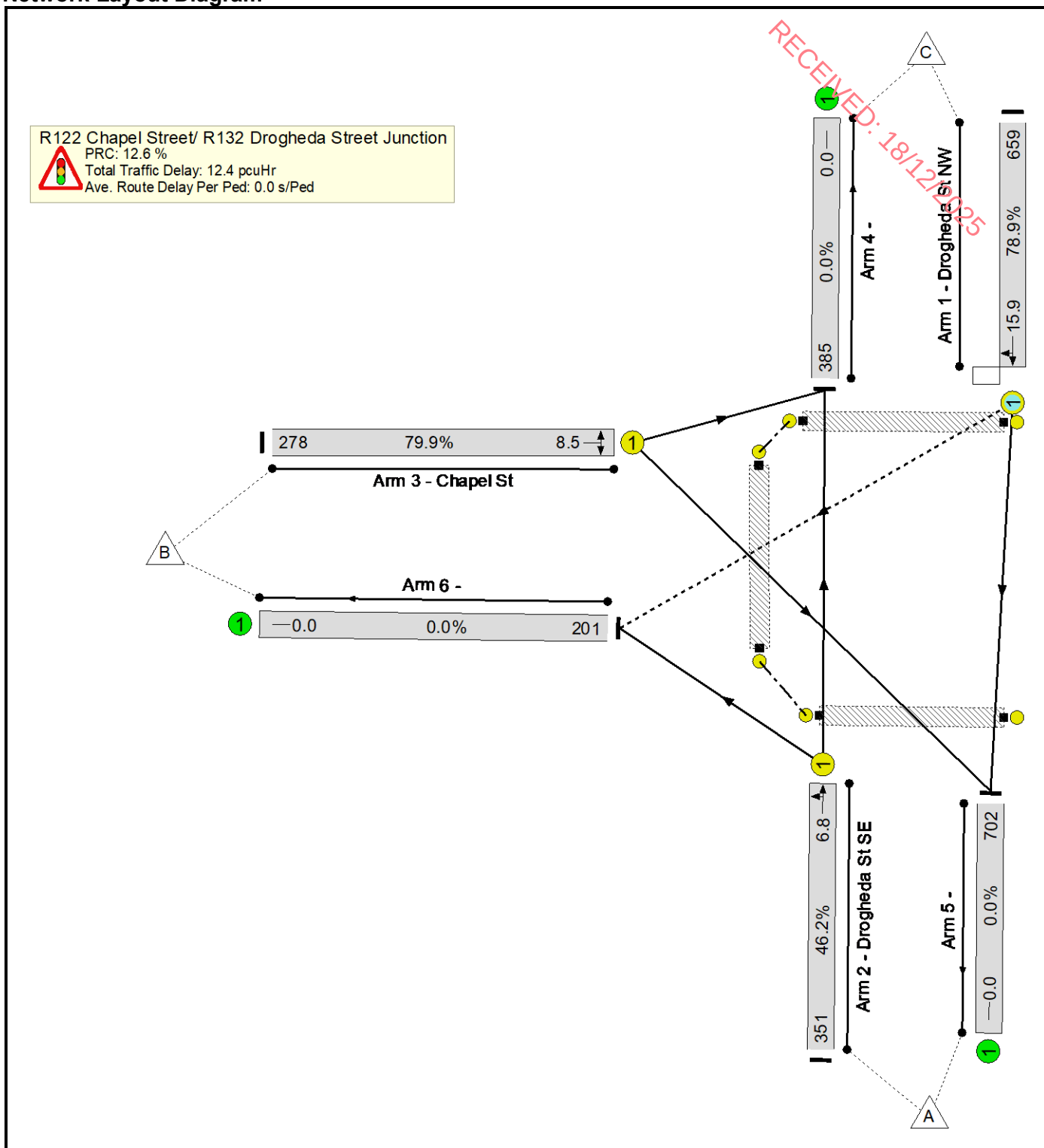


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	73.5%	90	8	1	11.2	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	73.5%	90	8	1	11.2	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	43	4	-	594	1894	808	73.5%	90	8	1	4.7	28.4	13.7
2/1	Drogheda St SE Ahead Left	U	B		1	34	-	-	372	1867	726	51.2%	-	-	-	2.7	26.1	7.6
3/1	Chapel St Left Right	U	C		1	19	-	-	282	1737	386	73.1%	-	-	-	3.9	49.4	7.8
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 22.5 Total Delay for Signalled Lanes (pcuHr): 11.25 Cycle Time (s): 90 PRC Over All Lanes (%): 22.5 Total Delay Over All Lanes(pcuHr): 11.25																		

Network Layout Diagram

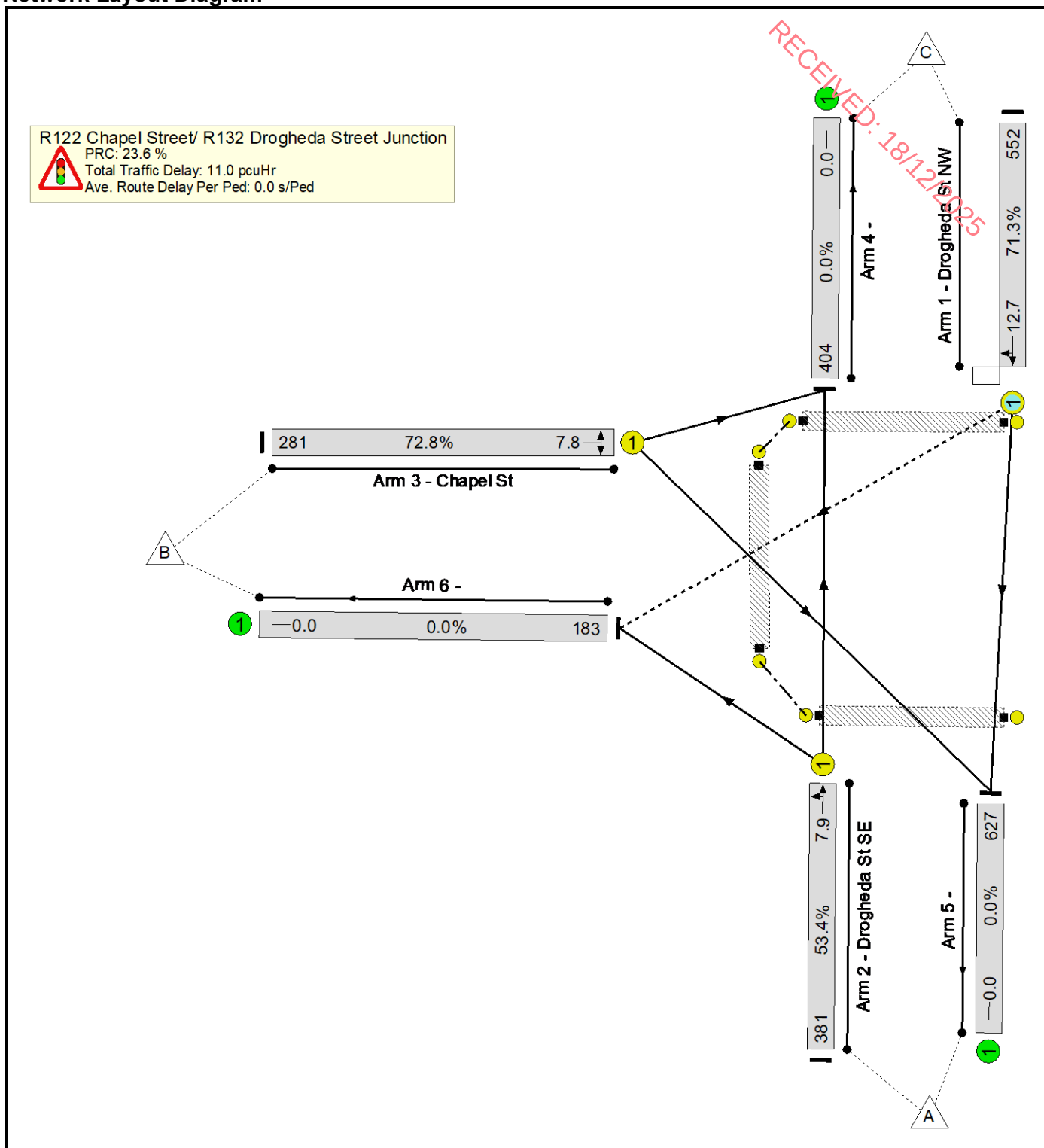


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	79.9%	128	11	2	12.4	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	79.9%	128	11	2	12.4	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	45	4	-	659	1885	835	78.9%	128	11	2	5.6	30.5	15.9
2/1	Drogheda St SE Ahead Left	U	B		1	36	-	-	351	1849	760	46.2%	-	-	-	2.3	23.7	6.8
3/1	Chapel St Left Right	U	C		1	17	-	-	278	1739	348	79.9%	-	-	-	4.5	58.7	8.5
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 12.6 Total Delay for Signalled Lanes (pcuHr): 12.42 Cycle Time (s): 90 PRC Over All Lanes (%): 12.6 Total Delay Over All Lanes(pcuHr): 12.42																		

Network Layout Diagram

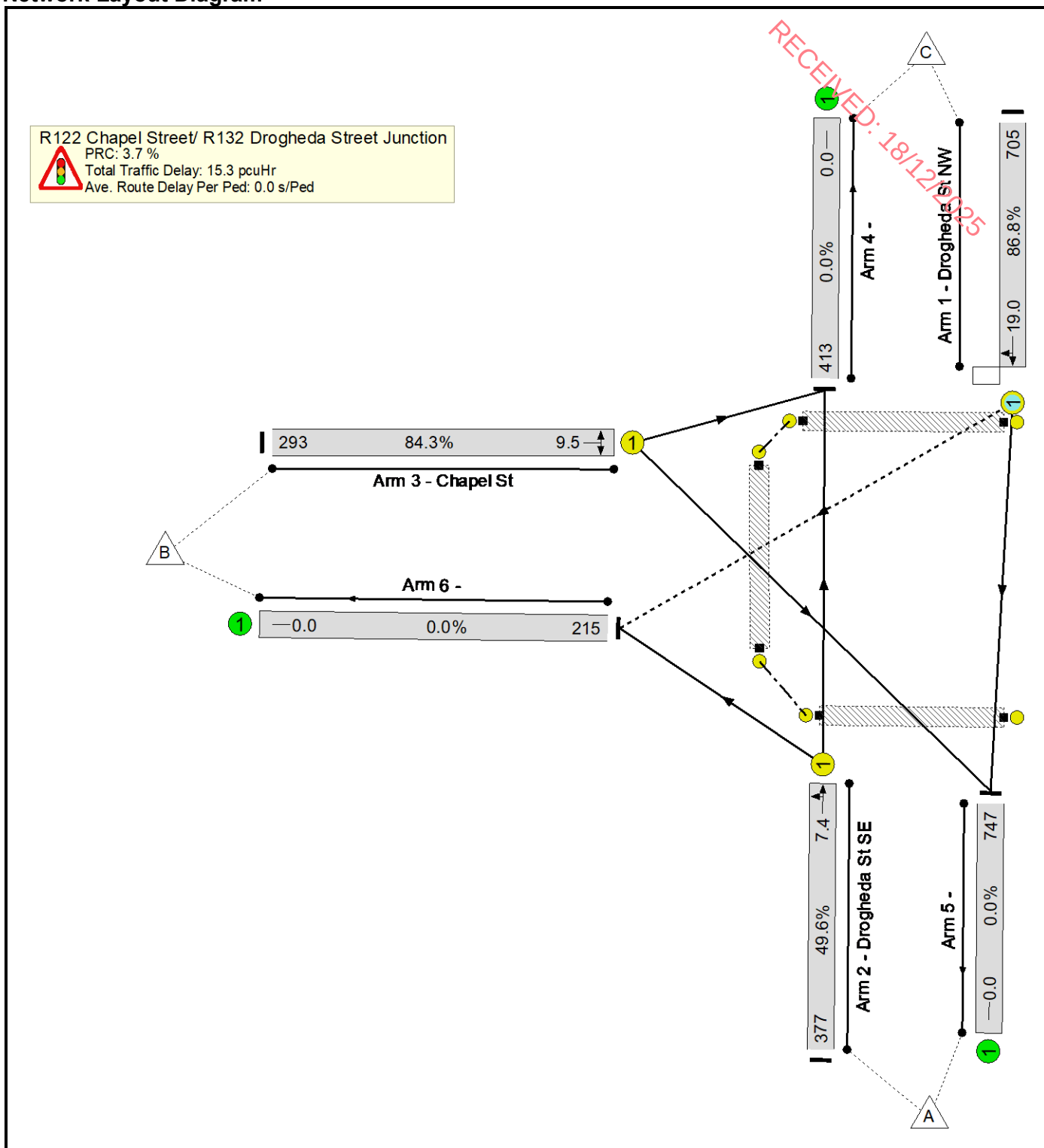


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	72.8%	97	8	1	11.0	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	72.8%	97	8	1	11.0	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	43	4	-	552	1889	774	71.3%	97	8	1	4.4	28.5	12.7
2/1	Drogheda St SE Ahead Left	U	B		1	34	-	-	381	1836	714	53.4%	-	-	-	2.8	26.6	7.9
3/1	Chapel St Left Right	U	C		1	19	-	-	281	1737	386	72.8%	-	-	-	3.8	49.2	7.8
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 23.6 Total Delay for Signalled Lanes (pcuHr): 11.02 Cycle Time (s): 90 PRC Over All Lanes (%): 23.6 Total Delay Over All Lanes(pcuHr): 11.02																		

Network Layout Diagram

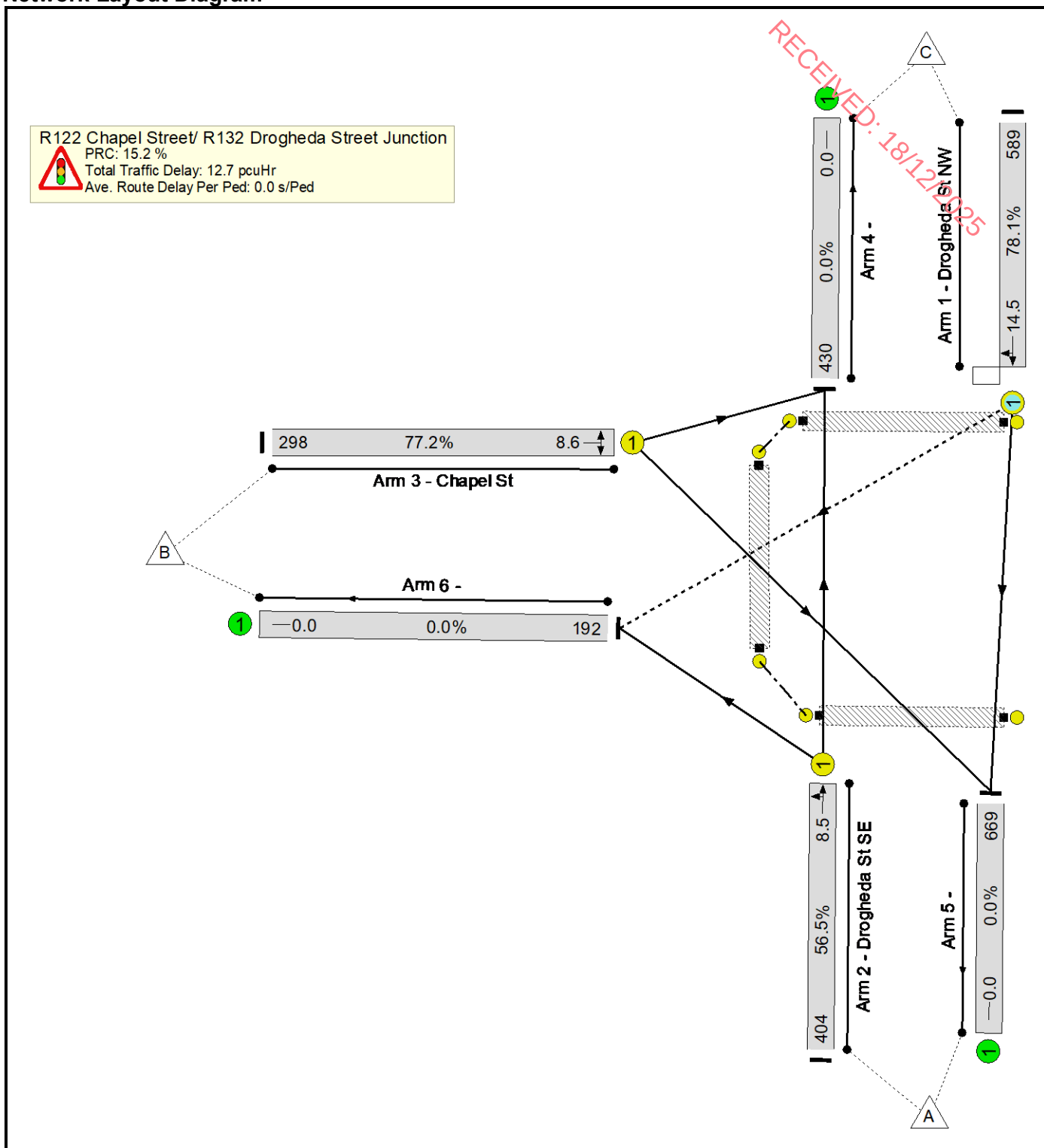


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	86.8%	138	12	2	15.3	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	86.8%	138	12	2	15.3	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	45	4	-	705	1885	812	86.8%	138	12	2	7.4	38.0	19.0
2/1	Drogheda St SE Ahead Left	U	B		1	36	-	-	377	1850	761	49.6%	-	-	-	2.5	24.3	7.4
3/1	Chapel St Left Right	U	C		1	17	-	-	293	1738	348	84.3%	-	-	-	5.3	64.9	9.5
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 3.7 Total Delay for Signalled Lanes (pcuHr): 15.26 Cycle Time (s): 90 PRC Over All Lanes (%): 3.7 Total Delay Over All Lanes(pcuHr): 15.26																		

Network Layout Diagram

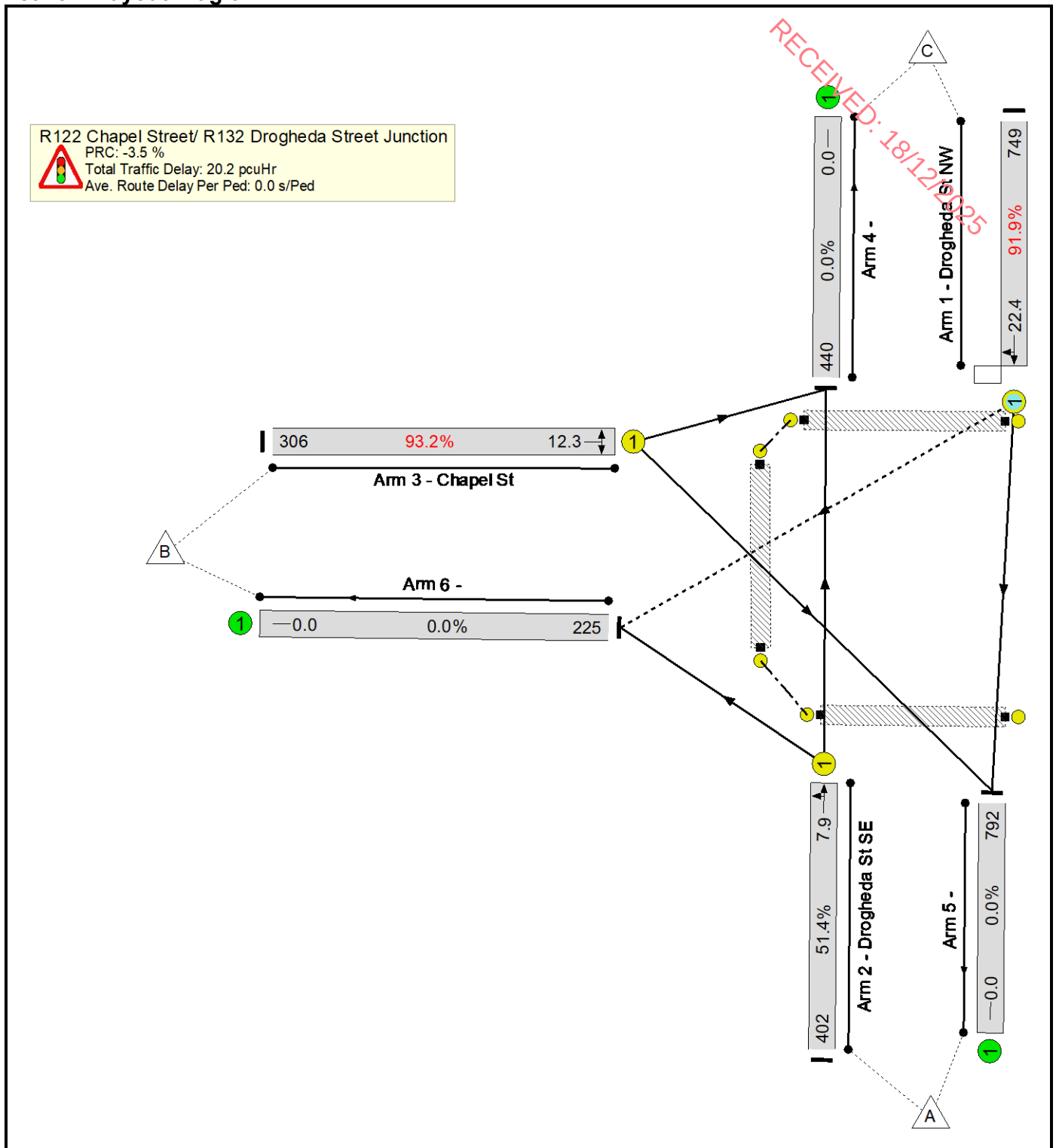


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	78.1%	102	9	1	12.7	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	78.1%	102	9	1	12.7	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	43	4	-	589	1889	754	78.1%	102	9	1	5.3	32.4	14.5
2/1	Drogheda St SE Ahead Left	U	B		1	34	-	-	404	1838	715	56.5%	-	-	-	3.1	27.3	8.5
3/1	Chapel St Left Right	U	C		1	19	-	-	298	1737	386	77.2%	-	-	-	4.4	52.6	8.6
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 15.2 Total Delay for Signalled Lanes (pcuHr): 12.72 Cycle Time (s): 90 PRC Over All Lanes (%): 15.2 Total Delay Over All Lanes(pcuHr): 12.72																		

Network Layout Diagram

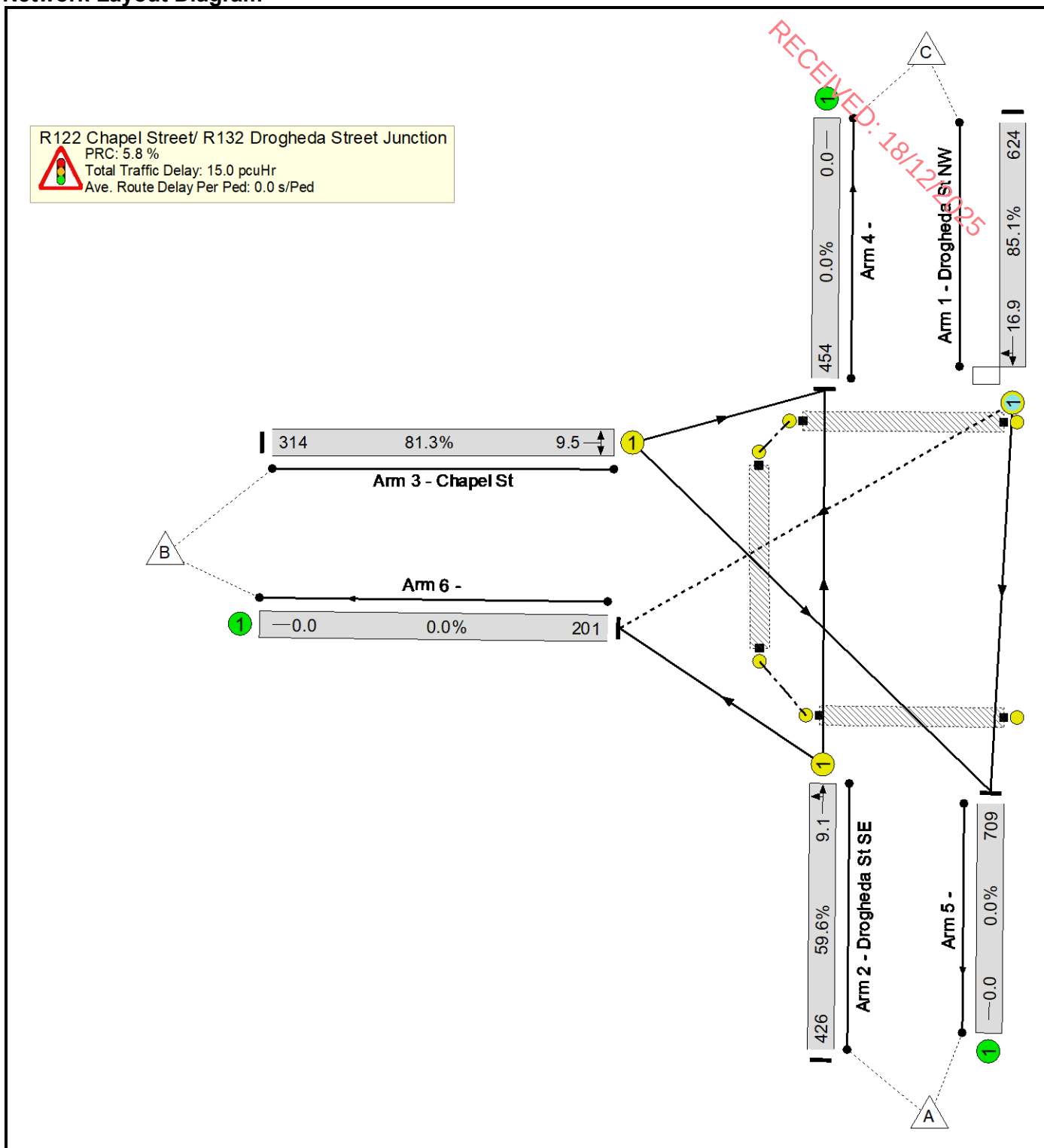


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	93.2%	137	20	2	20.2	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	93.2%	137	20	2	20.2	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	46	4	-	749	1885	815	91.9%	137	20	2	9.7	46.5	22.4
2/1	Drogheda St SE Ahead Left	U	B		1	37	-	-	402	1852	782	51.4%	-	-	-	2.7	23.9	7.9
3/1	Chapel St Left Right	U	C		1	16	-	-	306	1739	328	93.2%	-	-	-	7.8	92.1	12.3
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): -3.5 Total Delay for Signalled Lanes (pcuHr): 20.17 Cycle Time (s): 90 PRC Over All Lanes (%): -3.5 Total Delay Over All Lanes(pcuHr): 20.17																		

Network Layout Diagram

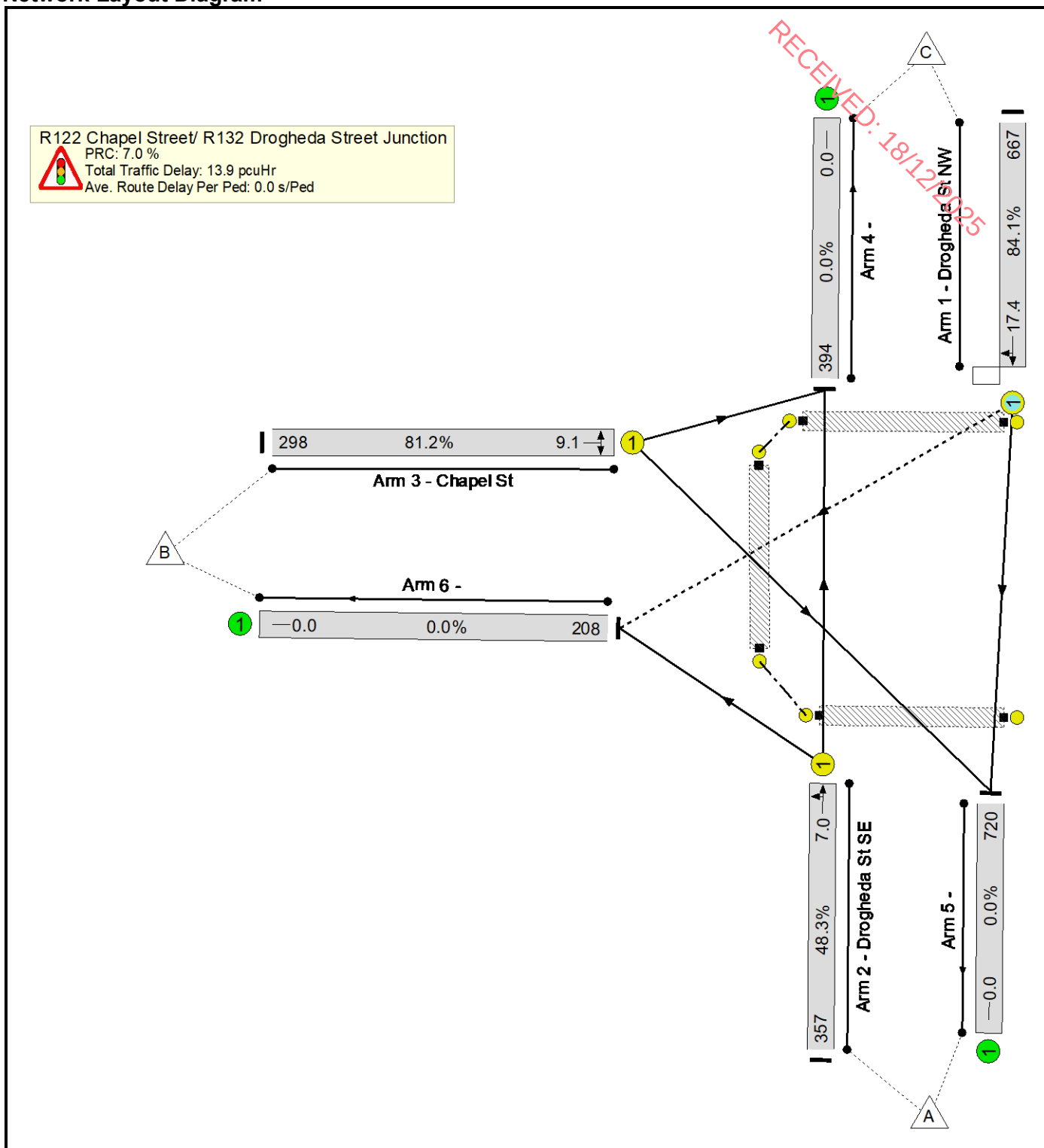


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	85.1%	107	10	1	15.0	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	85.1%	107	10	1	15.0	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	43	4	-	624	1890	733	85.1%	107	10	1	6.7	38.8	16.9
2/1	Drogheda St SE Ahead Left	U	B		1	34	-	-	426	1839	715	59.6%	-	-	-	3.3	28.1	9.1
3/1	Chapel St Left Right	U	C		1	19	-	-	314	1737	386	81.3%	-	-	-	5.0	56.9	9.5
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 5.8 Total Delay for Signalled Lanes (pcuHr): 15.00 Cycle Time (s): 90 PRC Over All Lanes (%): 5.8 Total Delay Over All Lanes(pcuHr): 15.00																		

Network Layout Diagram

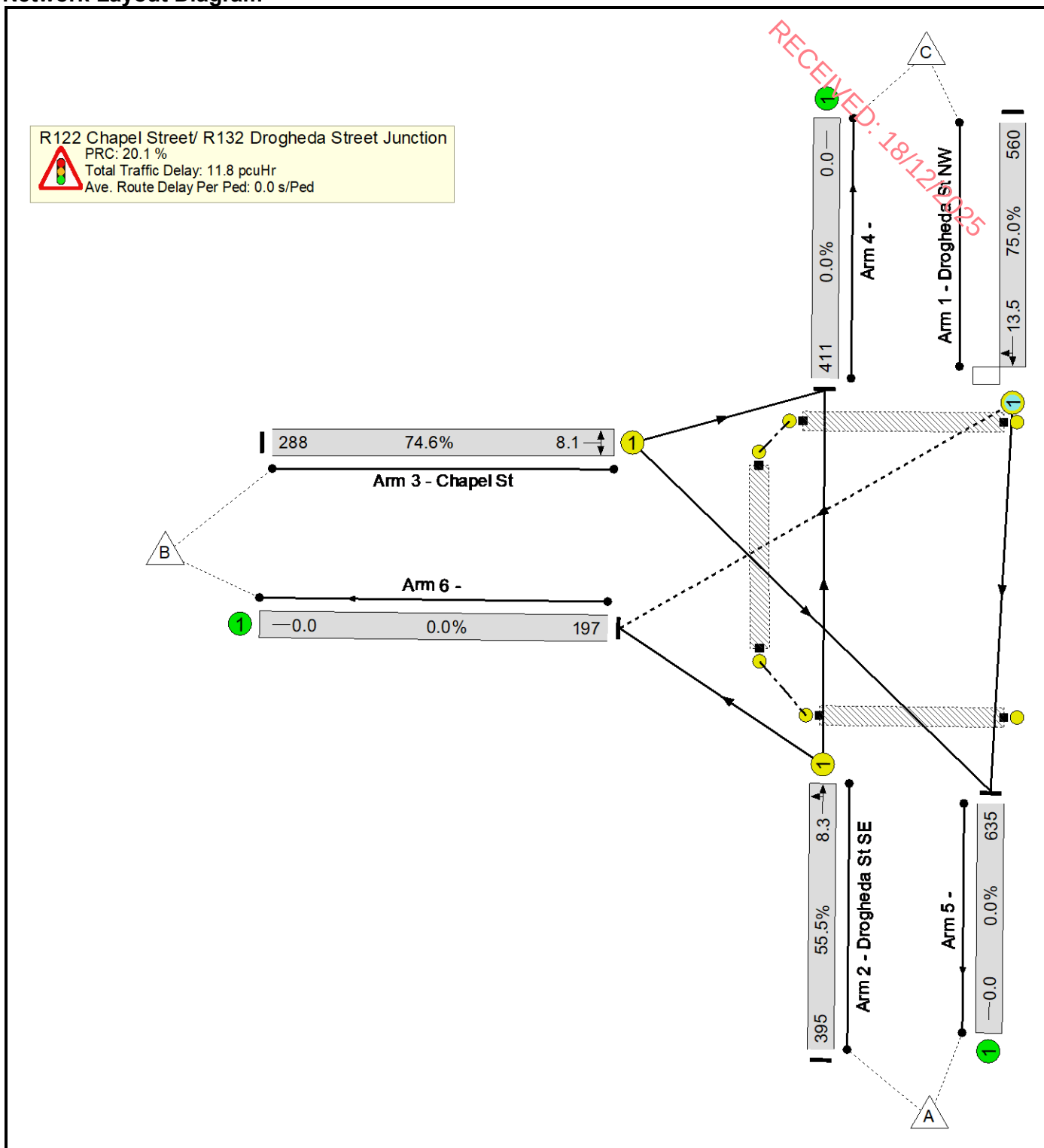


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	84.1%	131	11	2	13.9	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	84.1%	131	11	2	13.9	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	44	4	-	667	1885	793	84.1%	131	11	2	6.6	35.9	17.4
2/1	Drogheda St SE Ahead Left	U	B		1	35	-	-	357	1846	738	48.3%	-	-	-	2.5	24.8	7.0
3/1	Chapel St Left Right	U	C		1	18	-	-	298	1739	367	81.2%	-	-	-	4.8	58.4	9.1
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 7.0 Total Delay for Signalled Lanes (pcuHr): 13.94 Cycle Time (s): 90 PRC Over All Lanes (%): 7.0 Total Delay Over All Lanes(pcuHr): 13.94																		

Network Layout Diagram

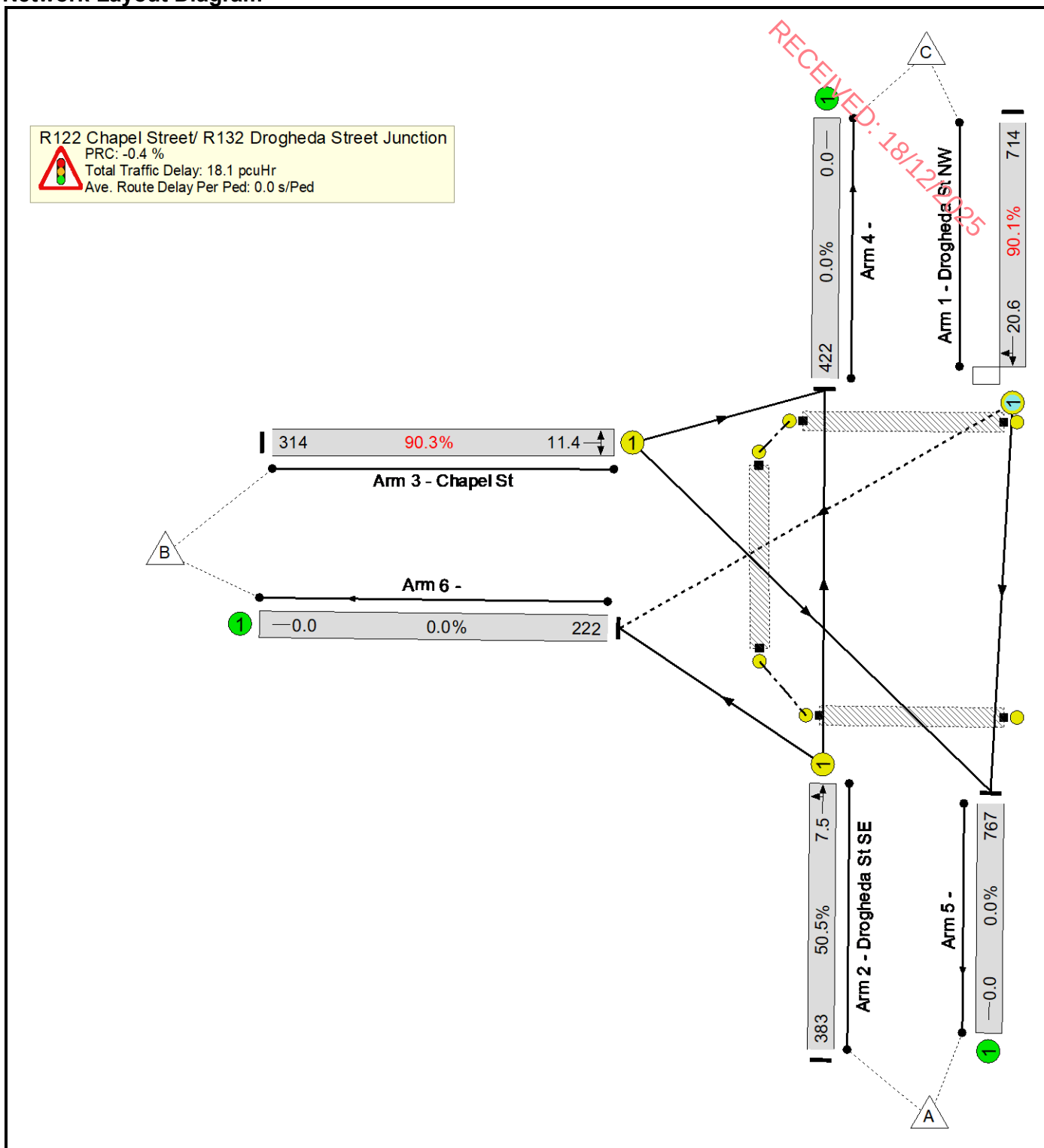


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	75.0%	101	9	1	11.8	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	75.0%	101	9	1	11.8	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	43	4	-	560	1888	747	75.0%	101	9	1	4.8	30.8	13.5
2/1	Drogheda St SE Ahead Left	U	B		1	34	-	-	395	1830	712	55.5%	-	-	-	3.0	27.1	8.3
3/1	Chapel St Left Right	U	C		1	19	-	-	288	1737	386	74.6%	-	-	-	4.0	50.5	8.1
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 20.1 Total Delay for Signalled Lanes (pcuHr): 11.81 Cycle Time (s): 90 PRC Over All Lanes (%): 20.1 Total Delay Over All Lanes(pcuHr): 11.81																		

Network Layout Diagram

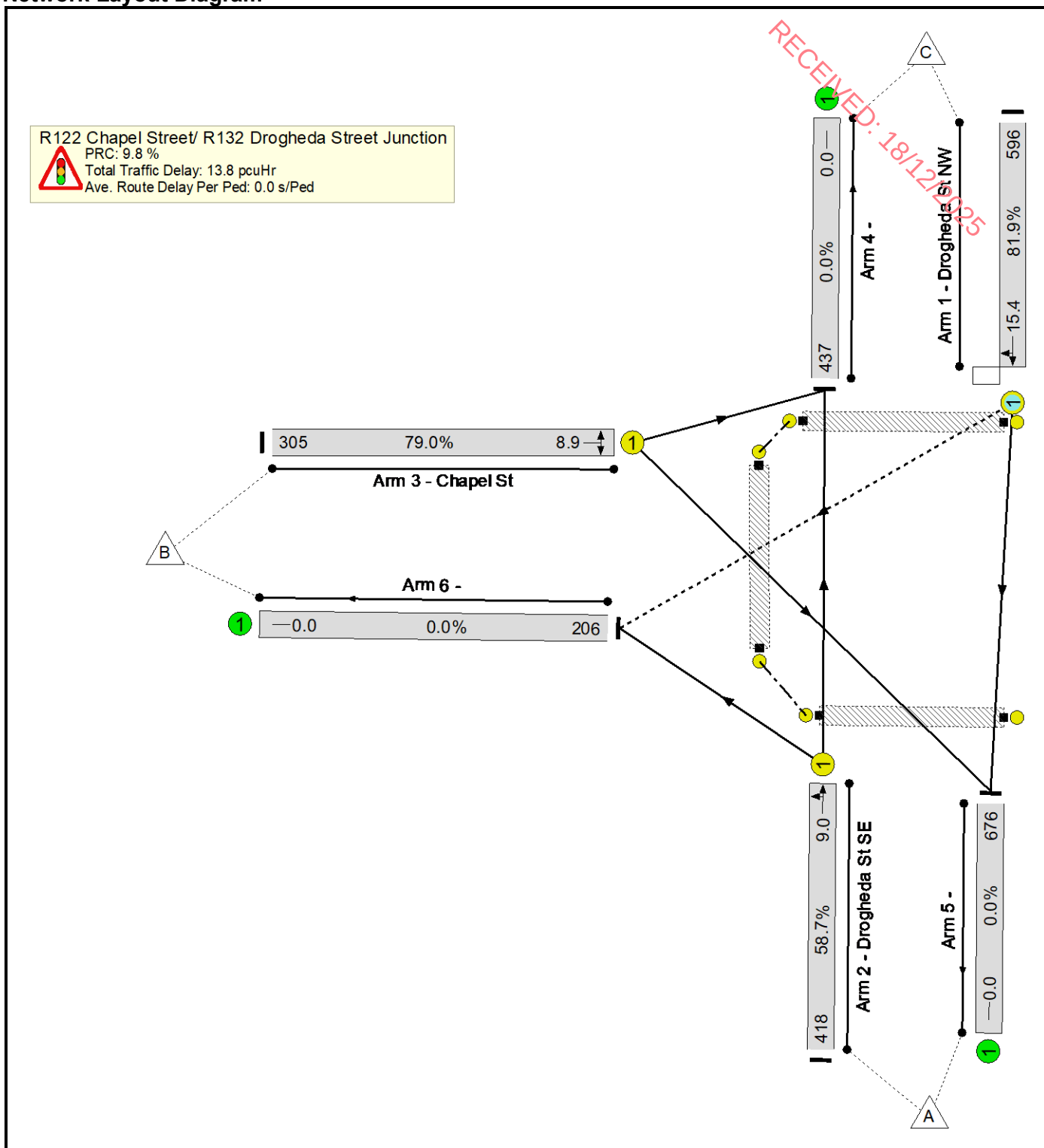


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	90.3%	135	17	2	18.1	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	90.3%	135	17	2	18.1	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	45	4	-	714	1885	793	90.1%	135	17	2	8.7	43.6	20.6
2/1	Drogheda St SE Ahead Left	U	B		1	36	-	-	383	1846	759	50.5%	-	-	-	2.6	24.5	7.5
3/1	Chapel St Left Right	U	C		1	17	-	-	314	1738	348	90.3%	-	-	-	6.9	78.8	11.4
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): -0.4 Total Delay for Signalled Lanes (pcuHr): 18.13 Cycle Time (s): 90 PRC Over All Lanes (%): -0.4 Total Delay Over All Lanes(pcuHr): 18.13																		

Network Layout Diagram

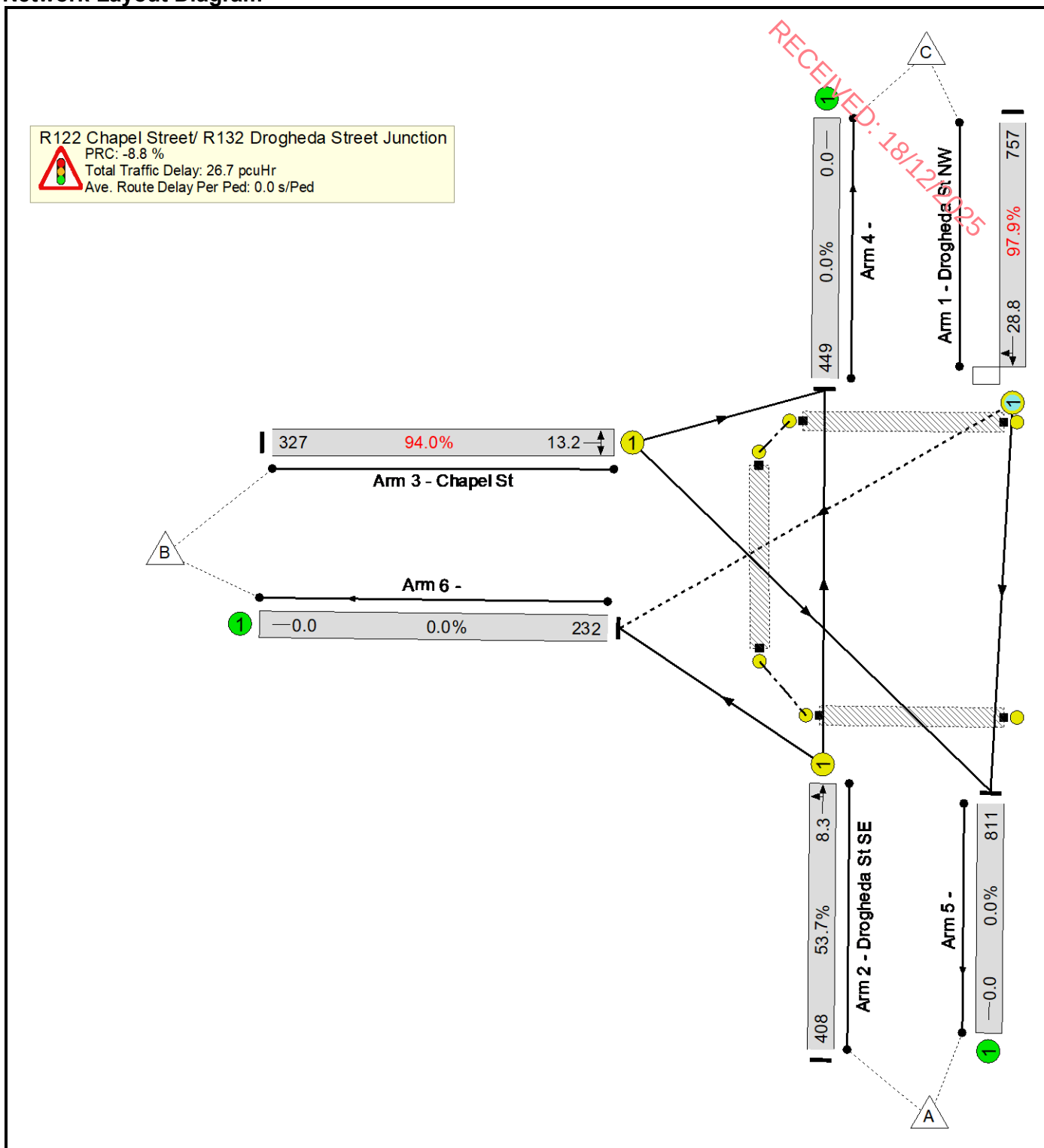


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	81.9%	107	9	1	13.8	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	81.9%	107	9	1	13.8	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	43	4	-	596	1888	727	81.9%	107	9	1	6.0	36.0	15.4
2/1	Drogheda St SE Ahead Left	U	B		1	34	-	-	418	1832	712	58.7%	-	-	-	3.2	27.9	9.0
3/1	Chapel St Left Right	U	C		1	19	-	-	305	1737	386	79.0%	-	-	-	4.6	54.3	8.9
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 9.8 PRC Over All Lanes (%): 9.8 Total Delay for Signalled Lanes (pcuHr): 13.79 Total Delay Over All Lanes(pcuHr): 13.79 Cycle Time (s): 90																		

Network Layout Diagram

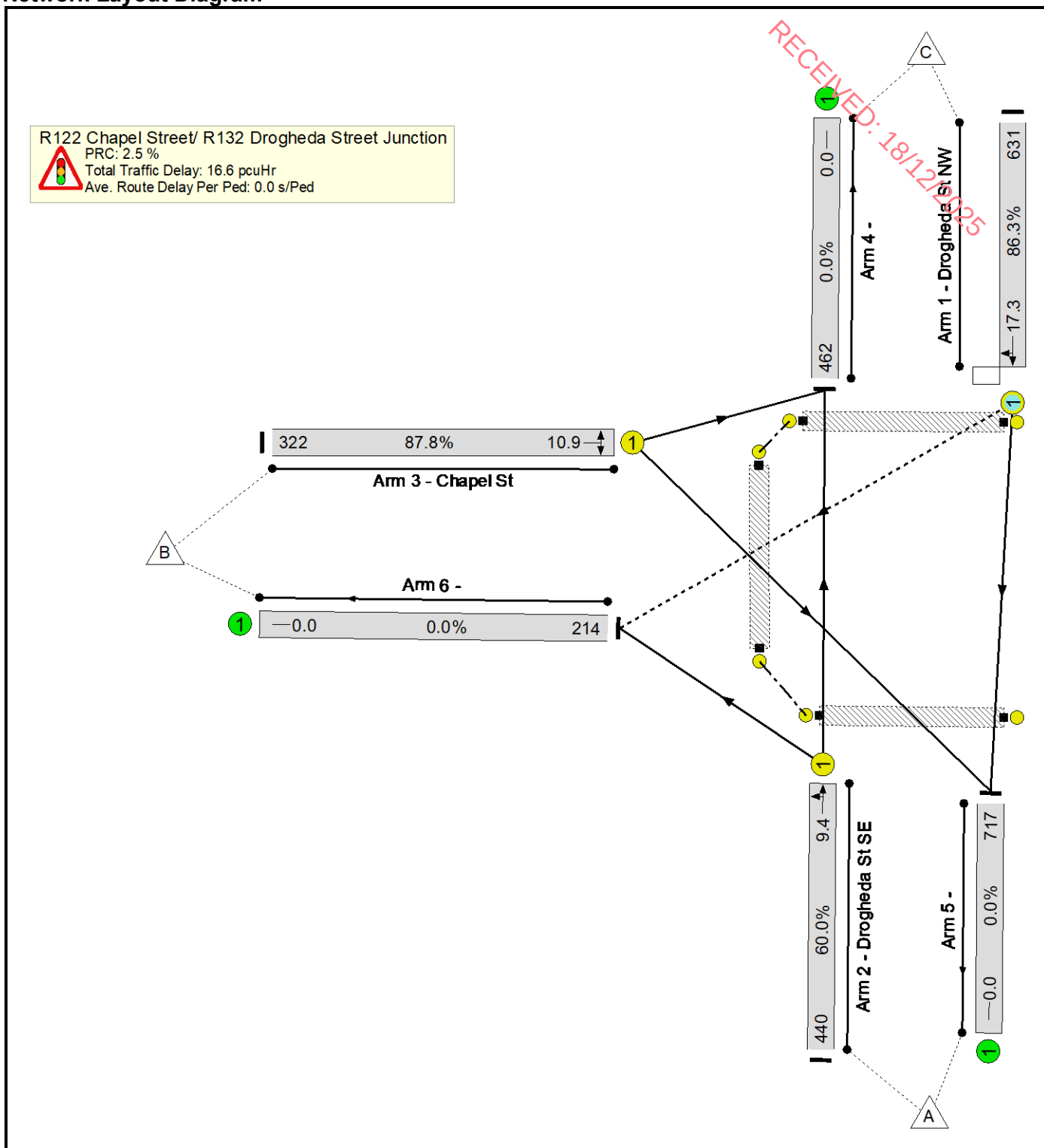


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	97.9%	130	31	2	26.7	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	97.9%	130	31	2	26.7	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	45	4	-	757	1885	773	97.9%	130	31	2	15.4	73.5	28.8
2/1	Drogheda St SE Ahead Left	U	B		1	36	-	-	408	1849	760	53.7%	-	-	-	2.8	25.1	8.3
3/1	Chapel St Left Right	U	C		1	17	-	-	327	1739	348	94.0%	-	-	-	8.5	93.1	13.2
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): -8.8 Total Delay for Signalled Lanes (pcuHr): 26.75 Cycle Time (s): 90 PRC Over All Lanes (%): -8.8 Total Delay Over All Lanes(pcuHr): 26.75																		

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	87.8%	109	12	1	16.6	-	-
R122 Chapel Street/ R132 Drogheda Street Junction	-	-	-		-	-	-	-	-	-	-	87.8%	109	12	1	16.6	-	-
1/1	Drogheda St NW Ahead Right	O	A	G	1	44	4	-	631	1889	731	86.3%	109	12	1	7.0	40.0	17.3
2/1	Drogheda St SE Ahead Left	U	B		1	35	-	-	440	1833	733	60.0%	-	-	-	3.4	27.4	9.4
3/1	Chapel St Left Right	U	C		1	18	-	-	322	1737	367	87.8%	-	-	-	6.2	69.7	10.9
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 2.5 Total Delay for Signalled Lanes (pcuHr): 16.59 Cycle Time (s): 90 PRC Over All Lanes (%): 2.5 Total Delay Over All Lanes(pcuHr): 16.59																		

J12 - Trimleston/ Hamlet Lane Lodge/ Barons Hall Rise Modelling Report

RECEIVED: 18/12/2025

Junctions 9				
PICADY 9 - Priority Intersection Module				
Version: 9.5.1.7462 © Copyright TRL Limited, 2019				
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk				
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Filename: Site 12 Trimleston Hamlet Ln Barons Hall Rise.j9

Path: C:\Users\Akshai\Transport Insights\TI - Projects 2025\C1266 2025 Glenveagh Flemington Lane Balbriggan LRD\Modelling and Analysis\Modelling\PICADY\Site 12

Report generation date: 21/08/2025 11:57:39

»Base 2025, AM
»Base 2025, PM
»DN 2027, AM
»DN 2027, PM
»DN 2032, AM
»DN 2032, PM
»DN 2042, AM
»DN 2042, PM
»DM 2027, AM
»DM 2027, PM
»DM 2032, AM
»DM 2032, PM
»DM 2042, AM
»DM 2042, PM
»DS 2027, AM
»DS 2027, PM
»DS 2032, AM
»DS 2032, PM
»DS 2042, AM
»DS 2042, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Base 2025									
Stream B-ACD	D1	0.7	13.96	0.38	B	D2	1.3	18.36	0.57	C
Stream A-BCD		0.0	6.41	0.00	A		0.0	6.30	0.02	A
Stream D-ABC		0.1	9.10	0.06	A		0.0	8.80	0.04	A
Stream C-ABD		0.2	8.44	0.16	A		0.1	7.25	0.09	A
	DN 2027									
Stream B-ACD	D3	0.7	14.56	0.40	B	D4	1.5	19.52	0.59	C
Stream A-BCD		0.0	6.44	0.00	A		0.0	6.32	0.02	A
Stream D-ABC		0.1	9.22	0.06	A		0.0	8.84	0.04	A
Stream C-ABD		0.2	8.58	0.17	A		0.1	7.30	0.09	A
	DN 2032									
Stream B-ACD		0.8	15.72	0.44	C		1.8	22.18	0.64	C

Stream A-BCD	D5	0.0	6.49	0.00	A	D6	0.0	6.36	0.02	A
Stream D-ABC		0.1	9.34	0.07	A		0.0	9.00	0.04	A
Stream C-ABD		0.3	8.75	0.18	A		0.1	7.37	0.10	A
	DN 2042									
Stream B-ACD	D7	1.0	17.13	0.47	C	D8	2.2	25.90	0.69	D
Stream A-BCD		0.0	6.54	0.00	A		0.0	6.39	0.02	A
Stream D-ABC		0.1	9.55	0.07	A		0.1	9.15	0.05	A
Stream C-ABD		0.3	9.00	0.20	A		0.1	7.45	0.10	A
	DM 2027									
Stream B-ACD	D9	0.9	16.20	0.45	C	D10	2.1	24.98	0.68	C
Stream A-BCD		0.0	6.78	0.00	A		0.0	6.48	0.02	A
Stream D-ABC		0.1	9.79	0.06	A		0.0	9.28	0.04	A
Stream C-ABD		0.4	8.83	0.25	A		0.2	7.54	0.13	A
	DM 2032									
Stream B-ACD	D11	1.0	17.71	0.48	C	D12	2.6	29.95	0.73	D
Stream A-BCD		0.0	6.83	0.00	A		0.0	6.52	0.02	A
Stream D-ABC		0.1	9.93	0.07	A		0.0	9.47	0.05	A
Stream C-ABD		0.4	9.06	0.26	A		0.2	7.68	0.14	A
	DM 2042									
Stream B-ACD	D13	1.2	19.57	0.52	C	D14	3.4	36.89	0.78	E
Stream A-BCD		0.0	6.89	0.00	A		0.0	6.55	0.02	A
Stream D-ABC		0.1	10.17	0.07	B		0.1	9.64	0.06	A
Stream C-ABD		0.5	9.27	0.28	A		0.2	7.75	0.15	A
	DS 2027									
Stream B-ACD	D15	0.9	16.62	0.45	C	D16	2.3	26.87	0.70	D
Stream A-BCD		0.0	6.86	0.00	A		0.0	6.51	0.02	A
Stream D-ABC		0.1	9.95	0.07	A		0.0	9.40	0.04	A
Stream C-ABD		0.4	8.89	0.27	A		0.2	7.62	0.14	A
	DS 2032									
Stream B-ACD	D17	1.0	18.30	0.50	C	D18	2.9	32.78	0.75	D
Stream A-BCD		0.0	6.93	0.00	A		0.0	6.56	0.02	A
Stream D-ABC		0.1	10.09	0.07	B		0.0	9.60	0.05	A
Stream C-ABD		0.5	9.14	0.28	A		0.2	7.72	0.15	A
	DS 2042									
Stream B-ACD	D19	1.2	20.26	0.54	C	D20	3.8	40.99	0.80	E
Stream A-BCD		0.0	6.98	0.00	A		0.0	6.59	0.02	A
Stream D-ABC		0.1	10.34	0.08	B		0.1	9.77	0.06	A
Stream C-ABD		0.5	9.39	0.30	A		0.2	7.85	0.16	A

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

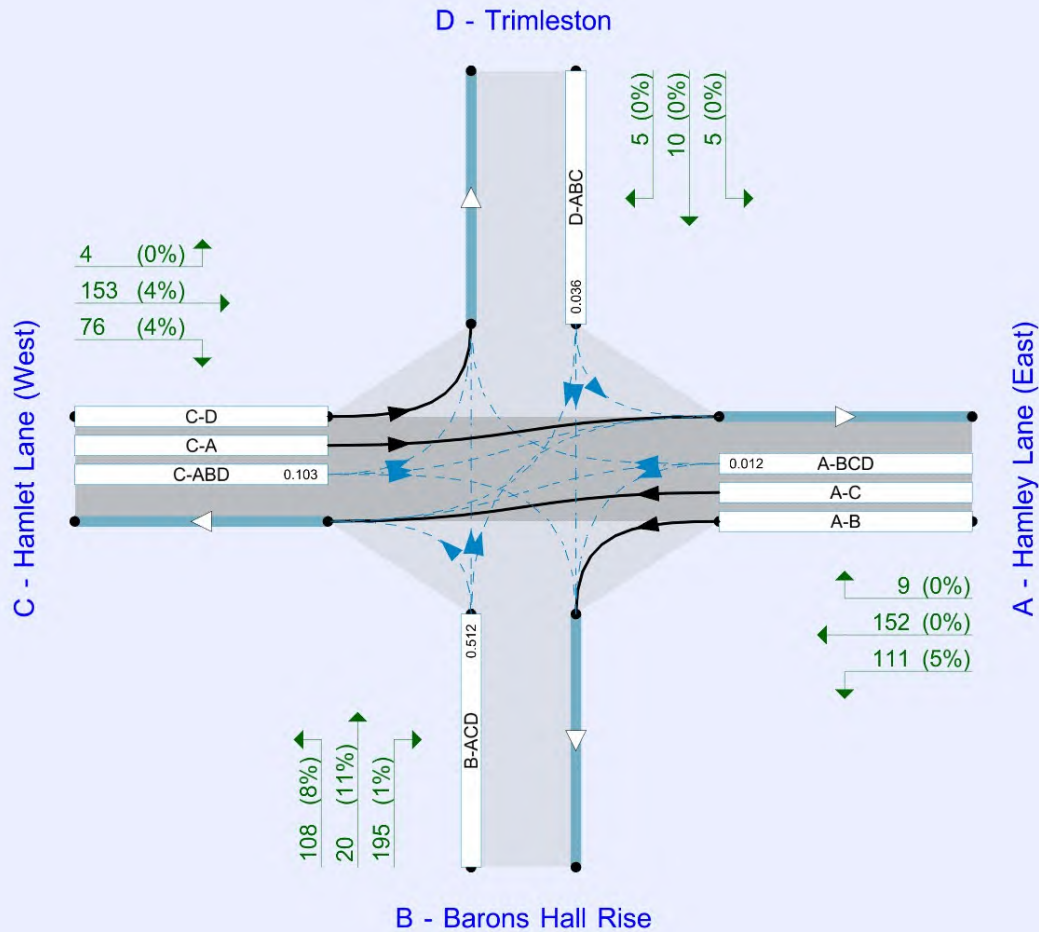
File summary

File Description

Title	Balbriggan, Ireland
Location	Trimleston/ Hamlet Lane Lodge/ Barons Hall
Site number	Site 12
Date	10/07/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Akshai
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	Base 2025	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base 2025	PM	ONE HOUR	16:30	18:00	15	✓
D3	DN 2027	AM	ONE HOUR	07:45	09:15	15	✓
D4	DN 2027	PM	ONE HOUR	16:30	18:00	15	✓
D5	DN 2032	AM	ONE HOUR	07:45	09:15	15	✓
D6	DN 2032	PM	ONE HOUR	16:30	18:00	15	✓
D7	DN 2042	AM	ONE HOUR	07:45	09:15	15	✓
D8	DN 2042	PM	ONE HOUR	16:30	18:00	15	✓
D9	DM 2027	AM	ONE HOUR	07:45	09:15	15	✓
D10	DM 2027	PM	ONE HOUR	16:30	18:00	15	✓
D11	DM 2032	AM	ONE HOUR	07:45	09:15	15	✓
D12	DM 2032	PM	ONE HOUR	16:30	18:00	15	✓
D13	DM 2042	AM	ONE HOUR	07:45	09:15	15	✓
D14	DM 2042	PM	ONE HOUR	16:30	18:00	15	✓
D15	DS 2027	AM	ONE HOUR	07:45	09:15	15	✓
D16	DS 2027	PM	ONE HOUR	16:30	18:00	15	✓
D17	DS 2032	AM	ONE HOUR	07:45	09:15	15	✓
D18	DS 2032	PM	ONE HOUR	16:30	18:00	15	✓
D19	DS 2042	AM	ONE HOUR	07:45	09:15	15	✓
D20	DS 2042	PM	ONE HOUR	16:30	18:00	15	✓

Analysis Set Details

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

Base 2025, AM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.38	13.96	0.7	B	145	218
ABCD	0.00	6.41	0.0	A	2	3
AB					182	273
AC					51	77
D-ABC	0.06	9.10	0.1	A	20	31
C-ABD	0.16	8.44	0.2	A	75	112
C-D					0	0
C-A					96	144

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	119	30	478	0.249	118	0.0	0.4	10.755	B
ABCD	2	0.38	582	0.003	1	0.0	0.0	6.206	A
AB	149	37			149				
AC	42	11			42				
D-ABC	17	4	444	0.038	17	0.0	0.0	8.423	A
C-ABD	61	15	572	0.106	60	0.0	0.1	7.789	A
C-D	0	0			0				
C-A	79	20			79				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	142	36	468	0.304	142	0.4	0.5	11.928	B
ABCD	2	0.45	574	0.003	2	0.0	0.0	6.291	A
AB	178	45			178				
AC	50	13			50				
D-ABC	20	5	434	0.046	20	0.0	0.0	8.696	A
C-ABD	73	18	568	0.128	73	0.1	0.2	8.060	A
C-D	0	0			0				
C-A	94	24			94				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	174	44	453	0.385	173	0.5	0.7	13.879	B
ABCD	2	0.55	564	0.004	2	0.0	0.0	6.411	A
A-B	218	55			218				
A-C	62	15			62				
D-ABC	24	6	420	0.058	24	0.0	0.1	9.094	A
C-ABD	91	23	564	0.161	90	0.2	0.2	8.433	A
C-D	0	0			0				
C-A	114	29			114				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	174	44	453	0.385	174	0.7	0.7	13.956	B
ABCD	2	0.55	564	0.004	2	0.0	0.0	6.411	A
A-B	218	55			218				
A-C	62	15			62				
D-ABC	24	6	420	0.058	24	0.1	0.1	9.097	A
C-ABD	91	23	563	0.161	91	0.2	0.2	8.436	A
C-D	0	0			0				
C-A	114	29			114				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	142	36	467	0.304	143	0.7	0.5	12.023	B
ABCD	2	0.45	574	0.003	2	0.0	0.0	6.293	A
A-B	178	45			178				
A-C	50	13			50				
D-ABC	20	5	434	0.046	20	0.1	0.0	8.700	A
C-ABD	73	18	568	0.129	73	0.2	0.2	8.070	A
C-D	0	0			0				
C-A	94	24			94				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	119	30	478	0.249	120	0.5	0.4	10.875	B
ABCD	2	0.38	581	0.003	2	0.0	0.0	6.211	A
A-B	149	37			149				
A-C	42	11			42				
D-ABC	17	4	444	0.038	17	0.0	0.0	8.434	A
C-ABD	61	15	572	0.106	61	0.2	0.1	7.810	A
C-D	0	0			0				
C-A	79	20			79				

Base 2025, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.57	18.36	1.3	C	220	331
ABCD	0.02	6.30	0.0	A	7	11
AB					86	129
AC					72	109
D-ABC	0.04	8.80	0.0	A	15	22
C-ABD	0.09	7.25	0.1	A	41	61
C-D					3	4
C-A					90	136

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-ACD	181	45	487	0.371	178	0.0	0.6	11.999	B
ABCD	6	2	592	0.010	6	0.0	0.0	6.141	A
AB	71	18			71				
AC	59	15			59				
D-ABC	12	3	448	0.027	12	0.0	0.0	8.264	A
C-ABD	33	8	579	0.058	33	0.0	0.1	6.917	A
C-D	2	0.56			2				
C-A	74	19			74				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	216	54	479	0.451	215	0.6	0.8	14.096	B
ABCD	7	2	587	0.012	7	0.0	0.0	6.209	A
AB	84	21			84				
AC	71	18			71				
D-ABC	15	4	439	0.033	15	0.0	0.0	8.483	A
C-ABD	40	10	575	0.070	40	0.1	0.1	7.061	A
C-D	3	0.67			3				
C-A	89	22			89				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	264	66	467	0.566	263	0.8	1.3	18.055	C
ABCD	9	2	580	0.015	9	0.0	0.0	6.303	A
A-B	103	26			103				
A-C	87	22			87				
D-ABC	18	4	427	0.042	18	0.0	0.0	8.797	A
C-ABD	49	12	570	0.087	49	0.1	0.1	7.254	A
C-D	3	0.82			3				
C-A	108	27			108				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	264	66	467	0.566	264	1.3	1.3	18.362	C
ABCD	9	2	580	0.015	9	0.0	0.0	6.303	A
A-B	103	26			103				
A-C	87	22			87				
D-ABC	18	4	427	0.042	18	0.0	0.0	8.799	A
C-ABD	49	12	570	0.087	49	0.1	0.1	7.254	A
C-D	3	0.82			3				
C-A	108	27			108				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	216	54	478	0.451	218	1.3	0.9	14.397	B
ABCD	7	2	587	0.012	7	0.0	0.0	6.212	A
A-B	84	21			84				
A-C	71	18			71				
D-ABC	15	4	439	0.033	15	0.0	0.0	8.489	A
C-ABD	40	10	575	0.070	40	0.1	0.1	7.063	A
C-D	3	0.67			3				
C-A	89	22			89				

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-ACD	181	45	487	0.372	182	0.9	0.6	12.271	B
ABCD	6	2	592	0.010	6	0.0	0.0	6.143	A
A-B	71	18			71				
A-C	59	15			59				
D-ABC	12	3	447	0.027	12	0.0	0.0	8.273	A
C-ABD	33	8	579	0.058	33	0.1	0.1	6.927	A
C-D	2	0.56			2				
C-A	74	19			74				

DN 2027, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.40	14.56	0.7	B	150	226
ABCD	0.00	6.44	0.0	A	2	3
AB					189	284
AC					53	80
D-ABC	0.06	9.22	0.1	A	21	32
C-ABD	0.17	8.58	0.2	A	78	117
C-D					0	0
C-A					99	149

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	123	31	476	0.259	122	0.0	0.4	11.034	B
ABCD	2	0.38	580	0.003	1	0.0	0.0	6.222	A
AB	155	39			155				
AC	44	11			44				
D-ABC	17	4	441	0.039	17	0.0	0.0	8.500	A
C-ABD	63	16	571	0.110	62	0.0	0.1	7.904	A
C-D	0	0			0				
C-A	82	21			82				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	147	37	465	0.317	147	0.4	0.5	12.312	B
ABCD	2	0.45	572	0.003	2	0.0	0.0	6.311	A
AB	185	46			185				
AC	52	13			52				
D-ABC	21	5	430	0.048	21	0.0	0.0	8.789	A
C-ABD	76	19	567	0.134	76	0.1	0.2	8.188	A
C-D	0	0			0				
C-A	98	24			98				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	181	45	450	0.401	180	0.5	0.7	14.466	B
ABCD	2	0.55	562	0.004	2	0.0	0.0	6.435	A
A-B	227	57			227				
A-C	64	16			64				
D-ABC	25	6	416	0.061	25	0.0	0.1	9.214	A
C-ABD	94	24	563	0.168	94	0.2	0.2	8.575	A
C-D	0	0			0				
C-A	118	30			118				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	181	45	450	0.401	181	0.7	0.7	14.558	B
ABCD	2	0.55	562	0.004	2	0.0	0.0	6.436	A
A-B	227	57			227				
A-C	64	16			64				
D-ABC	25	6	416	0.061	25	0.1	0.1	9.217	A
C-ABD	94	24	563	0.168	94	0.2	0.2	8.584	A
C-D	0	0			0				
C-A	118	30			118				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	147	37	465	0.317	148	0.7	0.5	12.422	B
ABCD	2	0.45	572	0.003	2	0.0	0.0	6.315	A
A-B	185	46			185				
A-C	52	13			52				
D-ABC	21	5	430	0.048	21	0.1	0.1	8.795	A
C-ABD	76	19	567	0.134	76	0.2	0.2	8.201	A
C-D	0	0			0				
C-A	98	24			98				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	123	31	476	0.259	124	0.5	0.4	11.166	B
ABCD	2	0.38	580	0.003	2	0.0	0.0	6.227	A
A-B	155	39			155				
A-C	44	11			44				
D-ABC	17	4	440	0.039	17	0.1	0.0	8.509	A
C-ABD	63	16	571	0.110	63	0.2	0.1	7.927	A
C-D	0	0			0				
C-A	82	21			82				

DN 2027, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.59	19.52	1.5	C	228	343
ABCD	0.02	6.32	0.0	A	7	11
AB					89	133
AC					75	113
D-ABC	0.04	8.84	0.0	A	15	22
C-ABD	0.09	7.30	0.1	A	43	64
C-D					3	4
C-A					94	141

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-ACD	187	47	485	0.386	185	0.0	0.6	12.329	B
ABCD	6	2	591	0.010	6	0.0	0.0	6.153	A
AB	73	18			73				
AC	62	15			62				
D-ABC	12	3	446	0.027	12	0.0	0.0	8.286	A
C-ABD	35	9	579	0.060	35	0.0	0.1	6.945	A
C-D	2	0.56			2				
C-A	77	19			77				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	224	56	477	0.469	223	0.6	0.9	14.642	B
ABCD	7	2	586	0.012	7	0.0	0.0	6.224	A
AB	87	22			87				
AC	74	18			74				
D-ABC	14	4	437	0.033	14	0.0	0.0	8.511	A
C-ABD	42	10	575	0.073	42	0.1	0.1	7.094	A
C-D	3	0.67			3				
C-A	92	23			92				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	274	69	465	0.589	272	0.9	1.4	19.133	C
ABCD	9	2	578	0.015	9	0.0	0.0	6.321	A
A-B	107	27			107				
A-C	90	23			90				
D-ABC	18	4	425	0.041	18	0.0	0.0	8.838	A
C-ABD	52	13	570	0.091	52	0.1	0.1	7.295	A
C-D	3	0.82			3				
C-A	112	28			112				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	274	69	465	0.590	274	1.4	1.5	19.521	C
ABCD	9	2	578	0.015	9	0.0	0.0	6.321	A
A-B	107	27			107				
A-C	90	23			90				
D-ABC	18	4	425	0.041	18	0.0	0.0	8.840	A
C-ABD	52	13	570	0.091	52	0.1	0.1	7.299	A
C-D	3	0.82			3				
C-A	112	28			112				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	224	56	477	0.469	226	1.5	0.9	15.005	C
ABCD	7	2	586	0.012	7	0.0	0.0	6.225	A
A-B	87	22			87				
A-C	74	18			74				
D-ABC	14	4	437	0.033	14	0.0	0.0	8.518	A
C-ABD	42	10	575	0.073	42	0.1	0.1	7.097	A
C-D	3	0.67			3				
C-A	92	23			92				

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-ACD	187	47	485	0.386	189	0.9	0.7	12.635	B
ABCD	6	2	591	0.010	6	0.0	0.0	6.155	A
A-B	73	18			73				
A-C	62	15			62				
D-ABC	12	3	446	0.027	12	0.0	0.0	8.294	A
C-ABD	35	9	579	0.060	35	0.1	0.1	6.955	A
C-D	2	0.56			2				
C-A	77	19			77				

DN 2032, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.44	15.72	0.8	C	162	242
ABCD	0.00	6.49	0.0	A	2	3
AB					203	304
AC					58	87
D-ABC	0.07	9.34	0.1	A	23	34
C-ABD	0.18	8.75	0.3	A	84	126
C-D					0	0
C-A					106	159

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	133	33	472	0.281	131	0.0	0.4	11.472	B
ABCD	2	0.38	577	0.003	1	0.0	0.0	6.253	A
AB	166	42			166				
AC	47	12			47				
D-ABC	19	5	439	0.043	19	0.0	0.0	8.550	A
C-ABD	68	17	570	0.119	67	0.0	0.2	8.001	A
C-D	0	0			0				
C-A	88	22			88				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	158	40	460	0.344	158	0.4	0.6	12.977	B
ABCD	2	0.45	569	0.003	2	0.0	0.0	6.350	A
AB	199	50			199				
AC	57	14			57				
D-ABC	22	6	428	0.052	22	0.0	0.1	8.866	A
C-ABD	82	20	566	0.145	82	0.2	0.2	8.315	A
C-D	0	0			0				
C-A	104	26			104				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	194	48	444	0.437	193	0.6	0.8	15.595	C
ABCD	2	0.55	557	0.004	2	0.0	0.0	6.485	A
A-B	243	61			243				
A-C	69	17			69				
D-ABC	28	7	413	0.067	27	0.1	0.1	9.333	A
C-ABD	102	26	562	0.182	102	0.2	0.3	8.739	A
C-D	0	0			0				
C-A	126	31			126				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	194	48	444	0.437	194	0.8	0.8	15.723	C
ABCD	2	0.55	557	0.004	2	0.0	0.0	6.485	A
A-B	243	61			243				
A-C	69	17			69				
D-ABC	28	7	413	0.067	28	0.1	0.1	9.336	A
C-ABD	102	26	562	0.182	102	0.3	0.3	8.749	A
C-D	0	0			0				
C-A	126	31			126				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	158	40	460	0.344	159	0.8	0.6	13.121	B
ABCD	2	0.45	569	0.003	2	0.0	0.0	6.354	A
A-B	199	50			199				
A-C	57	14			57				
D-ABC	22	6	428	0.052	23	0.1	0.1	8.874	A
C-ABD	82	20	565	0.145	82	0.3	0.2	8.327	A
C-D	0	0			0				
C-A	104	26			104				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	133	33	472	0.281	133	0.6	0.4	11.636	B
ABCD	2	0.38	577	0.003	2	0.0	0.0	6.256	A
A-B	166	42			166				
A-C	47	12			47				
D-ABC	19	5	439	0.043	19	0.1	0.0	8.564	A
C-ABD	68	17	570	0.119	68	0.2	0.2	8.028	A
C-D	0	0			0				
C-A	88	22			88				

DN 2032, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.64	22.18	1.8	C	244	366
ABCD	0.02	6.36	0.0	A	8	12
AB					95	143
AC					80	120
D-ABC	0.04	9.00	0.0	A	16	23
C-ABD	0.10	7.37	0.1	A	46	69
C-D					3	4
C-A					100	150

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-ACD	200	50	482	0.415	197	0.0	0.7	12.987	B
ABCD	7	2	589	0.012	7	0.0	0.0	6.180	A
AB	78	20			78				
AC	65	16			65				
D-ABC	13	3	442	0.029	13	0.0	0.0	8.392	A
C-ABD	37	9	577	0.065	37	0.0	0.1	6.995	A
C-D	2	0.56			2				
C-A	82	21			82				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	239	60	473	0.505	238	0.7	1.0	15.790	C
ABCD	8	2	584	0.014	8	0.0	0.0	6.255	A
AB	93	23			93				
AC	78	20			78				
D-ABC	15	4	432	0.035	15	0.0	0.0	8.639	A
C-ABD	45	11	573	0.078	45	0.1	0.1	7.155	A
C-D	3	0.67			3				
C-A	98	25			98				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	293	73	461	0.636	290	1.0	1.7	21.562	C
ABCD	10	2	576	0.017	10	0.0	0.0	6.359	A
A-B	114	29			114				
A-C	96	24			96				
D-ABC	19	5	419	0.045	19	0.0	0.0	8.998	A
C-ABD	55	14	568	0.097	55	0.1	0.1	7.371	A
C-D	3	0.82			3				
C-A	120	30			120				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	293	73	461	0.636	293	1.7	1.8	22.182	C
ABCD	10	2	576	0.017	10	0.0	0.0	6.360	A
A-B	114	29			114				
A-C	96	24			96				
D-ABC	19	5	419	0.045	19	0.0	0.0	9.002	A
C-ABD	55	14	568	0.097	55	0.1	0.1	7.374	A
C-D	3	0.82			3				
C-A	120	30			120				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	239	60	473	0.505	242	1.8	1.1	16.327	C
ABCD	8	2	584	0.014	8	0.0	0.0	6.259	A
A-B	93	23			93				
A-C	78	20			78				
D-ABC	15	4	432	0.035	15	0.0	0.0	8.647	A
C-ABD	45	11	573	0.078	45	0.1	0.1	7.158	A
C-D	3	0.67			3				
C-A	98	25			98				

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-ACD	200	50	482	0.415	202	1.1	0.8	13.382	B
ABCD	7	2	589	0.012	7	0.0	0.0	6.181	A
A-B	78	20			78				
A-C	65	16			65				
D-ABC	13	3	441	0.029	13	0.0	0.0	8.403	A
C-ABD	37	9	577	0.065	37	0.1	0.1	7.003	A
C-D	2	0.56			2				
C-A	82	21			82				

DN 2042, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.47	17.13	1.0	C	173	260
ABCD	0.00	6.54	0.0	A	2	3
AB					217	325
AC					61	92
D-ABC	0.07	9.55	0.1	A	24	36
C-ABD	0.20	9.00	0.3	A	91	137
C-D					0	0
C-A					112	169

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	142	36	468	0.304	140	0.0	0.5	11.957	B
ABCD	2	0.38	574	0.003	1	0.0	0.0	6.288	A
AB	178	44			178				
AC	50	13			50				
D-ABC	20	5	434	0.045	19	0.0	0.0	8.679	A
C-ABD	74	18	569	0.129	73	0.0	0.2	8.182	A
C-D	0	0			0				
C-A	94	23			94				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	170	42	456	0.373	169	0.5	0.6	13.734	B
ABCD	2	0.45	565	0.003	2	0.0	0.0	6.393	A
AB	212	53			212				
AC	60	15			60				
D-ABC	23	6	422	0.055	23	0.0	0.1	9.027	A
C-ABD	89	22	565	0.157	89	0.2	0.2	8.522	A
C-D	0	0			0				
C-A	111	28			111				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	208	52	438	0.475	207	0.6	1.0	16.942	C
ABCD	2	0.55	553	0.004	2	0.0	0.0	6.539	A
AB	260	65			260				
AC	74	18			74				
D-ABC	29	7	406	0.071	29	0.1	0.1	9.548	A
C-ABD	111	28	562	0.198	111	0.2	0.3	8.991	A
C-D	0	0			0				
C-A	133	33			133				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	208	52	438	0.475	208	1.0	1.0	17.127	C
ABCD	2	0.55	553	0.004	2	0.0	0.0	6.540	A
AB	260	65			260				
AC	74	18			74				
D-ABC	29	7	406	0.071	29	0.1	0.1	9.551	A
C-ABD	111	28	562	0.198	111	0.3	0.3	9.004	A
C-D	0	0			0				
C-A	133	33			133				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	170	42	456	0.373	171	1.0	0.7	13.928	B
ABCD	2	0.45	565	0.003	2	0.0	0.0	6.395	A
AB	212	53			212				
AC	60	15			60				
D-ABC	23	6	422	0.055	23	0.1	0.1	9.034	A
C-ABD	89	22	565	0.157	89	0.3	0.2	8.541	A
C-D	0	0			0				
C-A	111	28			111				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	142	36	468	0.304	143	0.7	0.5	12.158	B
ABCD	2	0.38	574	0.003	2	0.0	0.0	6.294	A
AB	178	44			178				
AC	50	13			50				
D-ABC	20	5	434	0.045	20	0.1	0.0	8.694	A
C-ABD	74	18	568	0.129	74	0.2	0.2	8.212	A
C-D	0	0			0				
C-A	94	23			94				

DN 2042, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.69	25.90	2.2	D	261	391
ABCD	0.02	6.39	0.0	A	8	12
AB					102	153
AC					85	128
D-ABC	0.05	9.15	0.1	A	18	28
C-ABD	0.10	7.45	0.1	A	49	73
C-D					4	5
C-A					106	160

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-ACD	214	53	480	0.446	211	0.0	0.8	13.775	B
ABCD	7	2	587	0.012	7	0.0	0.0	6.202	A
AB	84	21			84				
AC	70	18			70				
D-ABC	15	4	440	0.034	15	0.0	0.0	8.465	A
C-ABD	40	10	576	0.069	39	0.0	0.1	7.045	A
C-D	3	0.75			3				
C-A	88	22			88				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	255	64	470	0.543	254	0.8	1.2	17.227	C
ABCD	8	2	581	0.014	8	0.0	0.0	6.282	A
AB	100	25			100				
AC	84	21			84				
D-ABC	18	4	430	0.042	18	0.0	0.0	8.742	A
C-ABD	48	12	571	0.083	48	0.1	0.1	7.215	A
C-D	4	0.89			4				
C-A	104	26			104				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	313	78	456	0.685	309	1.2	2.1	24.838	C
ABCD	10	2	573	0.017	10	0.0	0.0	6.393	A
A-B	122	31			122				
A-C	102	26			102				
D-ABC	22	6	416	0.053	22	0.0	0.1	9.146	A
C-ABD	59	15	566	0.104	59	0.1	0.1	7.443	A
C-D	4	1			4				
C-A	127	32			127				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	313	78	456	0.685	312	2.1	2.2	25.901	D
ABCD	10	2	573	0.017	10	0.0	0.0	6.394	A
A-B	122	31			122				
A-C	102	26			102				
D-ABC	22	6	415	0.053	22	0.1	0.1	9.152	A
C-ABD	59	15	566	0.104	59	0.1	0.1	7.446	A
C-D	4	1			4				
C-A	127	32			127				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	255	64	470	0.544	259	2.2	1.3	18.062	C
ABCD	8	2	581	0.014	8	0.0	0.0	6.286	A
A-B	100	25			100				
A-C	84	21			84				
D-ABC	18	4	429	0.042	18	0.1	0.0	8.752	A
C-ABD	48	12	571	0.083	48	0.1	0.1	7.221	A
C-D	4	0.89			4				
C-A	104	26			104				

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-ACD	214	53	479	0.446	216	1.3	0.9	14.297	B
ABCD	7	2	587	0.012	7	0.0	0.0	6.204	A
A-B	84	21			84				
A-C	70	18			70				
D-ABC	15	4	440	0.034	15	0.0	0.0	8.479	A
C-ABD	40	10	576	0.069	40	0.1	0.1	7.056	A
C-D	3	0.75			3				
C-A	88	22			88				

DM 2027, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.45	16.20	0.9	C	162	242
ABCD	0.00	6.78	0.0	A	2	3
AB					189	284
AC					68	102
D-ABC	0.06	9.79	0.1	A	21	32
C-ABD	0.25	8.83	0.4	A	118	176
C-D					0	0
C-A					143	215

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	133	33	469	0.283	131	0.0	0.4	11.529	B
ABCD	2	0.38	561	0.003	1	0.0	0.0	6.434	A
AB	155	39			155				
AC	56	14			56				
D-ABC	17	4	425	0.041	17	0.0	0.0	8.820	A
C-ABD	94	24	580	0.162	93	0.0	0.2	7.963	A
C-D	0	0			0				
C-A	120	30			120				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	158	40	455	0.348	158	0.4	0.6	13.150	B
ABCD	2	0.45	549	0.003	2	0.0	0.0	6.575	A
AB	185	46			185				
AC	67	17			67				
D-ABC	21	5	412	0.050	21	0.0	0.1	9.206	A
C-ABD	114	29	580	0.197	114	0.2	0.3	8.320	A
C-D	0	0			0				
C-A	141	35			141				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	194	48	435	0.445	193	0.6	0.8	16.033	C
ABCD	2	0.55	534	0.004	2	0.0	0.0	6.774	A
A-B	227	57			227				
A-C	81	20			81				
D-ABC	25	6	393	0.064	25	0.1	0.1	9.789	A
C-ABD	144	36	584	0.247	144	0.3	0.4	8.810	A
C-D	0	0			0				
C-A	168	42			168				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	194	48	435	0.445	194	0.8	0.9	16.205	C
ABCD	2	0.55	533	0.004	2	0.0	0.0	6.776	A
A-B	227	57			227				
A-C	81	20			81				
D-ABC	25	6	393	0.064	25	0.1	0.1	9.794	A
C-ABD	144	36	584	0.247	144	0.4	0.4	8.826	A
C-D	0	0			0				
C-A	168	42			168				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	158	40	454	0.348	159	0.9	0.6	13.311	B
ABCD	2	0.45	549	0.003	2	0.0	0.0	6.580	A
A-B	185	46			185				
A-C	67	17			67				
D-ABC	21	5	411	0.050	21	0.1	0.1	9.216	A
C-ABD	114	29	580	0.197	115	0.4	0.3	8.345	A
C-D	0	0			0				
C-A	141	35			141				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	133	33	468	0.283	133	0.6	0.4	11.699	B
ABCD	2	0.38	561	0.003	2	0.0	0.0	6.441	A
A-B	155	39			155				
A-C	56	14			56				
D-ABC	17	4	425	0.041	17	0.1	0.0	8.835	A
C-ABD	94	24	580	0.162	94	0.3	0.2	8.001	A
C-D	0	0			0				
C-A	120	30			120				

DM 2027, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.68	24.98	2.1	C	257	385
ABCD	0.02	6.48	0.0	A	7	11
AB					89	133
AC					118	178
D-ABC	0.04	9.28	0.0	A	15	22
C-ABD	0.13	7.54	0.2	A	61	92
C-D					3	4
C-A					119	178

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-ACD	211	53	483	0.436	208	0.0	0.8	13.368	B
ABCD	6	2	582	0.010	6	0.0	0.0	6.254	A
AB	73	18			73				
AC	97	24			97				
D-ABC	12	3	433	0.028	12	0.0	0.0	8.538	A
C-ABD	50	12	574	0.087	49	0.0	0.1	7.059	A
C-D	2	0.56			2				
C-A	98	24			98				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	252	63	472	0.534	250	0.8	1.1	16.681	C
ABCD	7	2	574	0.013	7	0.0	0.0	6.347	A
AB	87	22			87				
AC	116	29			116				
D-ABC	14	4	422	0.034	14	0.0	0.0	8.835	A
C-ABD	60	15	570	0.105	60	0.1	0.1	7.261	A
C-D	3	0.67			3				
C-A	116	29			116				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	308	77	456	0.676	305	1.1	2.0	24.022	C
ABCD	9	2	565	0.016	9	0.0	0.0	6.475	A
A-B	107	27			107				
A-C	142	35			142				
D-ABC	18	4	406	0.043	18	0.0	0.0	9.273	A
C-ABD	74	19	566	0.131	74	0.1	0.2	7.532	A
C-D	3	0.81			3				
C-A	142	35			142				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	308	77	456	0.676	308	2.0	2.1	24.983	C
ABCD	9	2	565	0.016	9	0.0	0.0	6.476	A
A-B	107	27			107				
A-C	142	35			142				
D-ABC	18	4	406	0.043	18	0.0	0.0	9.280	A
C-ABD	74	19	566	0.131	74	0.2	0.2	7.535	A
C-D	3	0.81			3				
C-A	142	35			142				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	252	63	472	0.534	255	2.1	1.2	17.435	C
ABCD	7	2	574	0.013	7	0.0	0.0	6.351	A
A-B	87	22			87				
A-C	116	29			116				
D-ABC	14	4	422	0.034	14	0.0	0.0	8.845	A
C-ABD	60	15	570	0.105	60	0.2	0.1	7.269	A
C-D	3	0.67			3				
C-A	116	29			116				

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-ACD	211	53	483	0.437	212	1.2	0.8	13.840	B
ABCD	6	2	581	0.010	6	0.0	0.0	6.256	A
A-B	73	18			73				
A-C	97	24			97				
D-ABC	12	3	433	0.028	12	0.0	0.0	8.551	A
C-ABD	50	12	574	0.087	50	0.1	0.1	7.070	A
C-D	2	0.56			2				
C-A	98	24			98				

DM 2032, AM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.48	17.71	1.0	C	173	259
ABCD	0.00	6.83	0.0	A	2	3
AB					203	304
AC					72	109
D-ABC	0.07	9.93	0.1	A	23	34
C-ABD	0.26	9.06	0.4	A	124	187
C-D					0	0
C-A					149	223

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	142	35	464	0.305	140	0.0	0.5	12.030	B
ABCD	2	0.38	558	0.003	1	0.0	0.0	6.468	A
AB	166	42			166				
AC	59	15			59				
D-ABC	19	5	424	0.044	19	0.0	0.0	8.875	A
C-ABD	99	25	579	0.171	98	0.0	0.2	8.129	A
C-D	0	0			0				
C-A	125	31			125				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	169	42	449	0.377	168	0.5	0.6	13.939	B
ABCD	2	0.45	546	0.003	2	0.0	0.0	6.617	A
AB	199	50			199				
AC	71	18			71				
D-ABC	22	6	410	0.055	22	0.0	0.1	9.290	A
C-ABD	121	30	580	0.208	121	0.2	0.3	8.515	A
C-D	0	0			0				
C-A	147	37			147				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	207	52	428	0.483	206	0.6	1.0	17.392	C
ABCD	2	0.55	529	0.004	2	0.0	0.0	6.829	A
A-B	243	61			243				
A-C	87	22			87				
D-ABC	28	7	390	0.071	27	0.1	0.1	9.921	A
C-ABD	153	38	585	0.262	153	0.3	0.4	9.044	A
C-D	0	0			0				
C-A	175	44			175				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	207	52	428	0.484	207	1.0	1.0	17.713	C
ABCD	2	0.55	529	0.004	2	0.0	0.0	6.831	A
A-B	243	61			243				
A-C	87	22			87				
D-ABC	28	7	390	0.071	28	0.1	0.1	9.928	A
C-ABD	153	38	585	0.262	153	0.4	0.4	9.062	A
C-D	0	0			0				
C-A	175	44			175				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	169	42	449	0.377	170	1.0	0.7	14.156	B
ABCD	2	0.45	546	0.003	2	0.0	0.0	6.623	A
A-B	199	50			199				
A-C	71	18			71				
D-ABC	22	6	410	0.055	23	0.1	0.1	9.301	A
C-ABD	121	30	579	0.209	121	0.4	0.3	8.544	A
C-D	0	0			0				
C-A	147	37			147				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	142	35	463	0.305	142	0.7	0.5	12.239	B
ABCD	2	0.38	558	0.003	2	0.0	0.0	6.475	A
A-B	166	42			166				
A-C	59	15			59				
D-ABC	19	5	424	0.044	19	0.1	0.0	8.890	A
C-ABD	99	25	579	0.171	100	0.3	0.2	8.170	A
C-D	0	0			0				
C-A	125	31			125				

DM 2032, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.73	29.95	2.6	D	273	410
ABCD	0.02	6.52	0.0	A	8	12
AB					95	143
AC					124	186
D-ABC	0.05	9.47	0.0	A	16	23
C-ABD	0.14	7.68	0.2	A	64	97
C-D					3	4
C-A					126	188

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-ACD	224	56	479	0.468	221	0.0	0.9	14.246	B
ABCD	7	2	580	0.012	7	0.0	0.0	6.283	A
AB	78	20			78				
AC	102	25			102				
D-ABC	13	3	428	0.030	13	0.0	0.0	8.657	A
C-ABD	52	13	573	0.091	52	0.0	0.1	7.169	A
C-D	2	0.56			2				
C-A	104	26			104				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	268	67	468	0.573	266	0.9	1.3	18.357	C
ABCD	8	2	572	0.014	8	0.0	0.0	6.381	A
AB	93	23			93				
AC	121	30			121				
D-ABC	15	4	416	0.037	15	0.0	0.0	8.981	A
C-ABD	63	16	569	0.110	63	0.1	0.1	7.390	A
C-D	3	0.67			3				
C-A	123	31			123				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	328	82	451	0.727	323	1.3	2.5	28.214	D
ABCD	10	2	562	0.018	10	0.0	0.0	6.517	A
A-B	114	29			114				
A-C	149	37			149				
D-ABC	19	5	399	0.047	19	0.0	0.0	9.462	A
C-ABD	78	20	565	0.138	78	0.1	0.2	7.676	A
C-D	3	0.81			3				
C-A	150	37			150				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	328	82	451	0.728	328	2.5	2.6	29.947	D
ABCD	10	2	562	0.018	10	0.0	0.0	6.518	A
A-B	114	29			114				
A-C	149	37			149				
D-ABC	19	5	399	0.047	19	0.0	0.0	9.471	A
C-ABD	78	20	565	0.138	78	0.2	0.2	7.680	A
C-D	3	0.81			3				
C-A	150	37			150				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	268	67	467	0.573	273	2.6	1.5	19.579	C
ABCD	8	2	572	0.014	8	0.0	0.0	6.383	A
A-B	93	23			93				
A-C	121	30			121				
D-ABC	15	4	416	0.037	15	0.0	0.0	8.993	A
C-ABD	63	16	569	0.110	63	0.2	0.1	7.395	A
C-D	3	0.67			3				
C-A	123	31			123				

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-ACD	224	56	479	0.468	226	1.5	0.9	14.881	B
ABCD	7	2	580	0.012	7	0.0	0.0	6.285	A
A-B	78	20			78				
A-C	102	25			102				
D-ABC	13	3	428	0.030	13	0.0	0.0	8.669	A
C-ABD	52	13	573	0.091	52	0.1	0.1	7.188	A
C-D	2	0.56			2				
C-A	104	26			104				

DM 2042, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.52	19.57	1.2	C	184	277
ABCD	0.00	6.89	0.0	A	2	3
AB					217	325
AC					76	114
D-ABC	0.07	10.17	0.1	B	24	36
C-ABD	0.28	9.27	0.5	A	132	199
C-D					0	0
C-A					155	232

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	151	38	460	0.329	149	0.0	0.5	12.580	B
ABCD	2	0.38	555	0.003	1	0.0	0.0	6.505	A
AB	178	44			178				
AC	62	16			62				
D-ABC	20	5	419	0.047	19	0.0	0.0	9.016	A
C-ABD	105	26	579	0.182	104	0.0	0.3	8.242	A
C-D	0	0			0				
C-A	130	33			130				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	181	45	444	0.407	180	0.5	0.7	14.844	B
ABCD	2	0.45	542	0.003	2	0.0	0.0	6.664	A
AB	212	53			212				
AC	75	19			75				
D-ABC	23	6	403	0.058	23	0.0	0.1	9.470	A
C-ABD	129	32	580	0.222	128	0.3	0.3	8.661	A
C-D	0	0			0				
C-A	153	38			153				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	221	55	422	0.524	220	0.7	1.2	19.252	C
ABCD	2	0.55	525	0.004	2	0.0	0.0	6.890	A
A-B	260	65			260				
A-C	91	23			91				
D-ABC	29	7	383	0.075	29	0.1	0.1	10.167	B
C-ABD	164	41	586	0.279	163	0.3	0.5	9.244	A
C-D	0	0			0				
C-A	181	45			181				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	221	55	422	0.525	221	1.2	1.2	19.565	C
ABCD	2	0.55	525	0.004	2	0.0	0.0	6.892	A
A-B	260	65			260				
A-C	91	23			91				
D-ABC	29	7	382	0.075	29	0.1	0.1	10.175	B
C-ABD	164	41	586	0.279	164	0.5	0.5	9.265	A
C-D	0	0			0				
C-A	181	45			181				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	181	45	444	0.407	182	1.2	0.8	15.137	C
ABCD	2	0.45	542	0.003	2	0.0	0.0	6.670	A
A-B	212	53			212				
A-C	75	19			75				
D-ABC	23	6	403	0.058	23	0.1	0.1	9.482	A
C-ABD	129	32	579	0.222	129	0.5	0.3	8.694	A
C-D	0	0			0				
C-A	153	38			153				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	151	38	459	0.329	152	0.8	0.5	12.841	B
ABCD	2	0.38	554	0.003	2	0.0	0.0	6.513	A
A-B	178	44			178				
A-C	62	16			62				
D-ABC	20	5	418	0.047	20	0.1	0.0	9.033	A
C-ABD	105	26	578	0.182	106	0.3	0.3	8.288	A
C-D	0	0			0				
C-A	130	33			130				

DM 2042, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.78	36.89	3.4	E	290	435
ABCD	0.02	6.55	0.0	A	8	12
AB					102	153
AC					128	193
D-ABC	0.06	9.64	0.1	A	18	28
C-ABD	0.15	7.75	0.2	A	67	101
C-D					4	5
C-A					132	198

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-ACD	238	59	476	0.500	234	0.0	1.0	15.181	C
ABCD	7	2	578	0.012	7	0.0	0.0	6.306	A
AB	84	21			84				
AC	105	26			105				
D-ABC	15	4	427	0.035	15	0.0	0.0	8.734	A
C-ABD	55	14	572	0.095	54	0.0	0.1	7.221	A
C-D	3	0.75			3				
C-A	109	27			109				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	284	71	464	0.613	282	1.0	1.6	20.286	C
ABCD	8	2	570	0.014	8	0.0	0.0	6.410	A
AB	100	25			100				
AC	126	31			126				
D-ABC	18	4	414	0.043	18	0.0	0.0	9.093	A
C-ABD	66	16	568	0.116	66	0.1	0.1	7.446	A
C-D	4	0.89			4				
C-A	129	32			129				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	348	87	446	0.780	341	1.6	3.2	33.655	D
ABCD	10	2	559	0.018	10	0.0	0.0	6.553	A
A-B	122	31			122				
A-C	154	39			154				
D-ABC	22	6	396	0.056	22	0.0	0.1	9.628	A
C-ABD	82	20	565	0.145	82	0.1	0.2	7.748	A
C-D	4	1			4				
C-A	157	39			157				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	348	87	446	0.780	347	3.2	3.4	36.890	E
ABCD	10	2	559	0.018	10	0.0	0.0	6.553	A
A-B	122	31			122				
A-C	154	39			154				
D-ABC	22	6	395	0.056	22	0.1	0.1	9.639	A
C-ABD	82	20	565	0.145	82	0.2	0.2	7.755	A
C-D	4	1			4				
C-A	157	39			157				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	284	71	463	0.613	291	3.4	1.7	22.351	C
ABCD	8	2	570	0.014	8	0.0	0.0	6.414	A
A-B	100	25			100				
A-C	126	31			126				
D-ABC	18	4	413	0.044	18	0.1	0.0	9.109	A
C-ABD	66	16	568	0.116	66	0.2	0.1	7.454	A
C-D	4	0.89			4				
C-A	129	32			129				

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-ACD	238	59	476	0.500	241	1.7	1.1	16.038	C
ABCD	7	2	577	0.012	7	0.0	0.0	6.308	A
A-B	84	21			84				
A-C	105	26			105				
D-ABC	15	4	426	0.035	15	0.0	0.0	8.752	A
C-ABD	55	14	572	0.095	55	0.1	0.1	7.239	A
C-D	3	0.75			3				
C-A	109	27			109				

DS 2027, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.45	16.62	0.9	C	163	245
ABCD	0.00	6.86	0.0	A	2	3
AB					189	284
AC					72	107
D-ABC	0.07	9.95	0.1	A	21	32
C-ABD	0.27	8.89	0.4	A	128	191
C-D					0	0
C-A					153	230

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	134	34	466	0.287	132	0.0	0.4	11.641	B
ABCD	2	0.38	556	0.003	1	0.0	0.0	6.487	A
AB	155	39			155				
AC	59	15			59				
D-ABC	17	4	421	0.041	17	0.0	0.0	8.902	A
C-ABD	102	25	582	0.175	101	0.0	0.2	7.974	A
C-D	0	0			0				
C-A	129	32			129				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	160	40	451	0.355	159	0.4	0.6	13.349	B
ABCD	2	0.45	544	0.003	2	0.0	0.0	6.642	A
AB	185	46			185				
AC	70	18			70				
D-ABC	21	5	407	0.051	21	0.0	0.1	9.314	A
C-ABD	124	31	584	0.212	124	0.2	0.3	8.350	A
C-D	0	0			0				
C-A	151	38			151				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	196	49	431	0.455	195	0.6	0.9	16.457	C
ABCD	2	0.55	527	0.004	2	0.0	0.0	6.862	A
A-B	227	57			227				
A-C	86	21			86				
D-ABC	25	6	387	0.065	25	0.1	0.1	9.941	A
C-ABD	157	39	590	0.266	157	0.3	0.4	8.866	A
C-D	0	0			0				
C-A	180	45			180				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	196	49	431	0.455	196	0.9	0.9	16.621	C
ABCD	2	0.55	527	0.004	2	0.0	0.0	6.864	A
A-B	227	57			227				
A-C	86	21			86				
D-ABC	25	6	387	0.065	25	0.1	0.1	9.945	A
C-ABD	157	39	590	0.266	157	0.4	0.4	8.885	A
C-D	0	0			0				
C-A	180	45			180				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	160	40	451	0.355	161	0.9	0.6	13.523	B
ABCD	2	0.45	544	0.003	2	0.0	0.0	6.647	A
A-B	185	46			185				
A-C	70	18			70				
D-ABC	21	5	407	0.051	21	0.1	0.1	9.324	A
C-ABD	124	31	584	0.212	124	0.4	0.3	8.378	A
C-D	0	0			0				
C-A	151	38			151				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	134	34	466	0.288	135	0.6	0.4	11.818	B
ABCD	2	0.38	556	0.003	2	0.0	0.0	6.495	A
A-B	155	39			155				
A-C	59	15			59				
D-ABC	17	4	421	0.041	17	0.1	0.0	8.916	A
C-ABD	102	25	582	0.175	102	0.3	0.2	8.015	A
C-D	0	0			0				
C-A	129	32			129				

DS 2027, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.70	26.87	2.3	D	264	396
ABCD	0.02	6.51	0.0	A	7	11
AB					89	133
AC					129	194
D-ABC	0.04	9.40	0.0	A	15	22
C-ABD	0.14	7.62	0.2	A	65	98
C-D					3	4
C-A					125	187

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-ACD	217	54	482	0.449	214	0.0	0.8	13.650	B
ABCD	6	2	579	0.010	6	0.0	0.0	6.278	A
AB	73	18			73				
AC	106	27			106				
D-ABC	12	3	430	0.028	12	0.0	0.0	8.602	A
C-ABD	53	13	573	0.092	52	0.0	0.1	7.108	A
C-D	2	0.56			2				
C-A	103	26			103				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	259	65	470	0.550	257	0.8	1.2	17.282	C
ABCD	7	2	572	0.013	7	0.0	0.0	6.376	A
AB	87	22			87				
AC	127	32			127				
D-ABC	14	4	418	0.034	14	0.0	0.0	8.919	A
C-ABD	64	16	570	0.112	64	0.1	0.1	7.330	A
C-D	3	0.67			3				
C-A	122	31			122				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	317	79	454	0.698	313	1.2	2.2	25.634	D
ABCD	9	2	562	0.016	9	0.0	0.0	6.512	A
A-B	107	27			107				
A-C	155	39			155				
D-ABC	18	4	401	0.044	18	0.0	0.0	9.388	A
C-ABD	79	20	566	0.140	79	0.1	0.2	7.617	A
C-D	3	0.81			3				
C-A	149	37			149				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	317	79	454	0.699	317	2.2	2.3	26.870	D
ABCD	9	2	562	0.016	9	0.0	0.0	6.512	A
A-B	107	27			107				
A-C	155	39			155				
D-ABC	18	4	401	0.044	18	0.0	0.0	9.396	A
C-ABD	79	20	566	0.140	79	0.2	0.2	7.624	A
C-D	3	0.81			3				
C-A	149	37			149				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	259	65	470	0.550	263	2.3	1.3	18.198	C
ABCD	7	2	572	0.013	7	0.0	0.0	6.377	A
A-B	87	22			87				
A-C	127	32			127				
D-ABC	14	4	418	0.034	14	0.0	0.0	8.930	A
C-ABD	64	16	569	0.112	64	0.2	0.1	7.338	A
C-D	3	0.67			3				
C-A	122	31			122				

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-ACD	217	54	482	0.450	219	1.3	0.9	14.180	B
ABCD	6	2	579	0.010	6	0.0	0.0	6.280	A
A-B	73	18			73				
A-C	106	27			106				
D-ABC	12	3	430	0.028	12	0.0	0.0	8.616	A
C-ABD	53	13	573	0.092	53	0.1	0.1	7.130	A
C-D	2	0.56			2				
C-A	103	26			103				

DS 2032, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.50	18.30	1.0	C	175	263
ABCD	0.00	6.93	0.0	A	2	3
AB					203	304
AC					76	114
D-ABC	0.07	10.09	0.1	B	23	34
C-ABD	0.28	9.14	0.5	A	136	204
C-D					0	0
C-A					159	238

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	144	36	462	0.311	142	0.0	0.5	12.172	B
ABCD	2	0.38	553	0.003	1	0.0	0.0	6.525	A
AB	166	42			166				
AC	62	16			62				
D-ABC	19	5	420	0.045	19	0.0	0.0	8.961	A
C-ABD	108	27	582	0.185	107	0.0	0.3	8.150	A
C-D	0	0			0				
C-A	134	33			134				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	172	43	446	0.385	171	0.5	0.7	14.201	B
ABCD	2	0.45	540	0.003	2	0.0	0.0	6.689	A
AB	199	50			199				
AC	75	19			75				
D-ABC	22	6	405	0.055	22	0.0	0.1	9.404	A
C-ABD	132	33	584	0.225	131	0.3	0.3	8.558	A
C-D	0	0			0				
C-A	157	39			157				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	210	53	424	0.496	209	0.7	1.0	18.056	C
ABCD	2	0.55	522	0.004	2	0.0	0.0	6.923	A
A-B	243	61			243				
A-C	91	23			91				
D-ABC	28	7	384	0.072	27	0.1	0.1	10.084	B
C-ABD	168	42	592	0.283	167	0.3	0.5	9.123	A
C-D	0	0			0				
C-A	186	46			186				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	210	53	424	0.496	210	1.0	1.0	18.295	C
ABCD	2	0.55	522	0.004	2	0.0	0.0	6.925	A
A-B	243	61			243				
A-C	91	23			91				
D-ABC	28	7	384	0.072	28	0.1	0.1	10.091	B
C-ABD	168	42	591	0.284	168	0.5	0.5	9.144	A
C-D	0	0			0				
C-A	186	46			186				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	172	43	446	0.385	173	1.0	0.7	14.442	B
ABCD	2	0.45	540	0.003	2	0.0	0.0	6.695	A
A-B	199	50			199				
A-C	75	19			75				
D-ABC	22	6	405	0.056	23	0.1	0.1	9.414	A
C-ABD	132	33	584	0.226	132	0.5	0.3	8.590	A
C-D	0	0			0				
C-A	157	39			157				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	144	36	461	0.312	145	0.7	0.5	12.394	B
ABCD	2	0.38	553	0.003	2	0.0	0.0	6.530	A
A-B	166	42			166				
A-C	62	16			62				
D-ABC	19	5	420	0.045	19	0.1	0.0	8.977	A
C-ABD	108	27	582	0.185	108	0.3	0.3	8.197	A
C-D	0	0			0				
C-A	134	33			134				

DS 2032, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.75	32.78	2.9	D	281	421
ABCD	0.02	6.56	0.0	A	8	12
AB					95	143
AC					135	202
D-ABC	0.05	9.60	0.0	A	16	23
C-ABD	0.15	7.72	0.2	A	69	104
C-D					3	4
C-A					132	198

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-ACD	230	58	478	0.482	227	0.0	0.9	14.589	B
ABCD	7	2	577	0.012	7	0.0	0.0	6.310	A
AB	78	20			78				
AC	111	28			111				
D-ABC	13	3	425	0.030	13	0.0	0.0	8.724	A
C-ABD	56	14	572	0.098	56	0.0	0.1	7.173	A
C-D	2	0.56			2				
C-A	109	27			109				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	275	69	466	0.591	273	0.9	1.4	19.122	C
ABCD	8	2	569	0.014	8	0.0	0.0	6.414	A
AB	93	23			93				
AC	132	33			132				
D-ABC	15	4	412	0.037	15	0.0	0.0	9.071	A
C-ABD	68	17	568	0.119	68	0.1	0.1	7.401	A
C-D	3	0.66			3				
C-A	129	32			129				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	337	84	448	0.751	332	1.4	2.8	30.484	D
ABCD	10	2	559	0.018	10	0.0	0.0	6.558	A
A-B	114	29			114				
A-C	162	40			162				
D-ABC	19	5	394	0.047	19	0.0	0.0	9.587	A
C-ABD	84	21	565	0.149	84	0.1	0.2	7.709	A
C-D	3	0.81			3				
C-A	157	39			157				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	337	84	448	0.751	336	2.8	2.9	32.783	D
ABCD	10	2	559	0.018	10	0.0	0.0	6.559	A
A-B	114	29			114				
A-C	162	40			162				
D-ABC	19	5	394	0.048	19	0.0	0.0	9.597	A
C-ABD	84	21	565	0.149	84	0.2	0.2	7.716	A
C-D	3	0.81			3				
C-A	157	39			157				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	275	69	466	0.591	281	2.9	1.6	20.655	C
ABCD	8	2	569	0.014	8	0.0	0.0	6.415	A
A-B	93	23			93				
A-C	132	33			132				
D-ABC	15	4	412	0.037	15	0.0	0.0	9.085	A
C-ABD	68	17	568	0.119	68	0.2	0.1	7.413	A
C-D	3	0.66			3				
C-A	129	32			129				

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-ACD	230	58	478	0.482	233	1.6	1.0	15.308	C
ABCD	7	2	577	0.012	7	0.0	0.0	6.314	A
A-B	78	20			78				
A-C	111	28			111				
D-ABC	13	3	425	0.030	13	0.0	0.0	8.741	A
C-ABD	56	14	572	0.098	56	0.1	0.1	7.191	A
C-D	2	0.56			2				
C-A	109	27			109				

DS 2042, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.54	20.26	1.2	C	187	281
ABCD	0.00	6.98	0.0	A	2	3
AB					217	325
AC					80	120
D-ABC	0.08	10.34	0.1	B	24	36
C-ABD	0.30	9.39	0.5	A	143	215
C-D					0	0
C-A					164	247

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	154	38	458	0.336	151	0.0	0.5	12.734	B
ABCD	2	0.38	550	0.003	1	0.0	0.0	6.560	A
AB	178	44			178				
AC	65	16			65				
D-ABC	20	5	415	0.047	19	0.0	0.0	9.100	A
C-ABD	113	28	582	0.195	112	0.0	0.3	8.314	A
C-D	0	0			0				
C-A	139	35			139				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	183	46	441	0.416	183	0.5	0.8	15.132	C
ABCD	2	0.45	536	0.003	2	0.0	0.0	6.733	A
AB	212	53			212				
AC	78	20			78				
D-ABC	23	6	399	0.059	23	0.0	0.1	9.585	A
C-ABD	139	35	585	0.237	138	0.3	0.4	8.752	A
C-D	0	0			0				
C-A	163	41			163				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	225	56	418	0.537	223	0.8	1.2	19.903	C
ABCD	2	0.55	518	0.004	2	0.0	0.0	6.981	A
A-B	260	65			260				
A-C	96	24			96				
D-ABC	29	7	377	0.076	29	0.1	0.1	10.332	B
C-ABD	177	44	594	0.299	177	0.4	0.5	9.361	A
C-D	0	0			0				
C-A	192	48			192				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	225	56	418	0.537	225	1.2	1.2	20.262	C
ABCD	2	0.55	518	0.004	2	0.0	0.0	6.983	A
A-B	260	65			260				
A-C	96	24			96				
D-ABC	29	7	377	0.076	29	0.1	0.1	10.340	B
C-ABD	177	44	593	0.299	177	0.5	0.5	9.387	A
C-D	0	0			0				
C-A	192	48			192				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	183	46	441	0.416	185	1.2	0.8	15.462	C
ABCD	2	0.45	536	0.003	2	0.0	0.0	6.739	A
A-B	212	53			212				
A-C	78	20			78				
D-ABC	23	6	399	0.059	23	0.1	0.1	9.598	A
C-ABD	139	35	584	0.237	139	0.5	0.4	8.791	A
C-D	0	0			0				
C-A	163	41			163				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	154	38	457	0.336	155	0.8	0.6	13.013	B
ABCD	2	0.38	550	0.003	2	0.0	0.0	6.566	A
A-B	178	44			178				
A-C	65	16			65				
D-ABC	20	5	414	0.047	20	0.1	0.1	9.120	A
C-ABD	113	28	582	0.195	114	0.4	0.3	8.365	A
C-D	0	0			0				
C-A	139	35			139				

DS 2042, PM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-ACD	0.80	40.99	3.8	E	296	445
ABCD	0.02	6.59	0.0	A	8	12
AB					102	153
AC					139	209
D-ABC	0.06	9.77	0.1	A	18	28
C-ABD	0.16	7.85	0.2	A	72	109
C-D					4	5
C-A					138	207

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-ACD	243	61	475	0.512	239	0.0	1.1	15.597	C
ABCD	7	2	575	0.012	7	0.0	0.0	6.333	A
AB	84	21			84				
AC	114	29			114				
D-ABC	15	4	424	0.036	15	0.0	0.0	8.804	A
C-ABD	59	15	571	0.103	58	0.0	0.1	7.287	A
C-D	3	0.74			3				
C-A	114	28			114				

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	290	73	461	0.629	288	1.1	1.7	21.227	C
ABCD	8	2	567	0.014	8	0.0	0.0	6.442	A
AB	100	25			100				
AC	137	34			137				
D-ABC	18	4	410	0.044	18	0.0	0.0	9.185	A
C-ABD	71	18	568	0.124	71	0.1	0.2	7.525	A
C-D	4	0.88			4				
C-A	135	34			135				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	356	89	443	0.803	348	1.7	3.5	36.659	E
ABCD	10	3	556	0.018	10	0.0	0.0	6.594	A
A-B	122	31			122				
A-C	167	42			167				
D-ABC	22	6	391	0.056	22	0.0	0.1	9.757	A
C-ABD	88	22	565	0.156	88	0.2	0.2	7.848	A
C-D	4	1			4				
C-A	164	41			164				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	356	89	443	0.803	355	3.5	3.8	40.990	E
ABCD	10	3	556	0.018	10	0.0	0.0	6.595	A
A-B	122	31			122				
A-C	167	42			167				
D-ABC	22	6	390	0.056	22	0.1	0.1	9.770	A
C-ABD	88	22	565	0.156	88	0.2	0.2	7.855	A
C-D	4	1			4				
C-A	164	41			164				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-ACD	290	73	461	0.629	298	3.8	1.9	23.873	C
ABCD	8	2	567	0.014	8	0.0	0.0	6.447	A
A-B	100	25			100				
A-C	137	34			137				
D-ABC	18	4	409	0.044	18	0.1	0.0	9.203	A
C-ABD	71	18	568	0.124	71	0.2	0.2	7.538	A
C-D	4	0.88			4				
C-A	135	34			135				

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-ACD	243	61	474	0.513	246	1.9	1.1	16.576	C
ABCD	7	2	575	0.012	7	0.0	0.0	6.335	A
A-B	84	21			84				
A-C	114	29			114				
D-ABC	15	4	423	0.036	15	0.0	0.0	8.823	A
C-ABD	59	15	571	0.103	59	0.2	0.1	7.303	A
C-D	3	0.74			3				
C-A	114	28			114				

J15.1 – M1/ R122 Interchange Eastern Roundabout Modelling Report

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Junctions 9	
ARCADY 9 - Roundabout Module	
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Filename: 18072025-Site 15a Rbt.j9

Path: C:\Users\Akshai\Transport Insights\TI - Projects 2025\C1266 2025 Glenveagh Flemington Lane Balbriggan LRD\Modelling and Analysis\Modelling\ARCADY\Site 15 a_b M1 junction

Report generation date: 21/08/2025 11:32:29

»Base 2025, AM
 »Base 2025, PM
 »DN 2027, AM
 »DN 2027, PM
 »DN 2032, AM
 »DN 2032, PM
 »DN 2042, AM
 »DN 2042, PM
 »DM 2027, AM
 »DM 2027, PM
 »DM 2032, AM
 »DM 2032, PM
 »DM 2042, AM
 »DM 2042, PM
 »DS 2027, AM
 »DS 2027, PM
 »DS 2032, AM
 »DS 2032, PM
 »DS 2042, AM
 »DS 2042, PM

Summary of junction performance

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	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Base 2025									
1 - R122(ENE)	D1	10.9	40.13	0.93	E	D2	2.2	9.78	0.68	A
3 - R122(WSW)		1.4	6.30	0.56	A		2.1	7.94	0.67	A
4 - M1 Off Slip		0.7	7.09	0.41	A		0.3	5.76	0.24	A
	DN 2027									
1 - R122(ENE)	D3	16.8	58.06	0.97	F	D4	2.5	10.68	0.71	B
3 - R122(WSW)		1.5	6.63	0.58	A		2.3	8.59	0.70	A
4 - M1 Off Slip		0.8	7.55	0.43	A		0.3	6.04	0.26	A
	DN 2032									
1 - R122(ENE)	D5	41.7	120.92	1.05	F	D6	3.2	13.08	0.76	B
3 - R122(WSW)		1.8	7.37	0.62	A		2.9	10.31	0.75	B
4 - M1 Off Slip		1.0	8.74	0.49	A		0.4	6.66	0.29	A
	DN 2042									
1 - R122(ENE)	D7	81.8	225.79	1.13	F	D8	4.3	16.65	0.81	C
3 - R122(WSW)		2.1	8.39	0.67	A		3.8	12.61	0.79	B
4 - M1 Off Slip		1.3	10.26	0.54	B		0.5	7.40	0.33	A
	DM 2027									
1 - R122(ENE)	D9	68.4	182.07	1.10	F	D10	3.4	13.76	0.77	B
3 - R122(WSW)		1.7	7.04	0.61	A		3.1	10.82	0.76	B
4 - M1 Off Slip		0.9	8.04	0.45	A		0.5	7.21	0.33	A
	DM 2032									
1 - R122(ENE)	D11	113.1	339.87	1.18	F	D12	4.7	17.79	0.83	C
3 - R122(WSW)		2.0	7.95	0.65	A		4.1	13.49	0.81	B
4 - M1 Off Slip		1.1	9.38	0.51	A		0.6	8.12	0.37	A
	DM 2042									
1 - R122(ENE)	D13	167.4	530.78	1.26	F	D14	6.7	24.76	0.88	C
3 - R122(WSW)		2.4	9.08	0.69	A		5.7	17.82	0.86	C
4 - M1 Off Slip		1.4	11.16	0.57	B		0.7	9.25	0.42	A
	DS 2027									
1 - R122(ENE)	D15	86.5	240.25	1.13	F	D16	3.8	14.81	0.79	B
3 - R122(WSW)		1.7	7.16	0.62	A		3.4	11.55	0.78	B
4 - M1 Off Slip		0.9	8.16	0.46	A		0.5	7.58	0.35	A
	DS 2032									
1 - R122(ENE)	D17	133.6	415.08	1.21	F	D18	5.2	19.55	0.84	C
3 - R122(WSW)		2.1	8.11	0.66	A		4.5	14.63	0.82	B
4 - M1 Off Slip		1.1	9.55	0.51	A		0.6	8.58	0.40	A
	DS 2042									
1 - R122(ENE)	D19	197.7	615.17	1.29	F	D20	7.7	27.99	0.89	D
3 - R122(WSW)		2.5	9.28	0.70	A		6.4	19.77	0.87	C
4 - M1 Off Slip		1.4	11.40	0.57	B		0.8	9.84	0.44	A

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

File summary

File Description

Title	C1266 2025 Glenveagh Flemington Lane Balbriggan LRD
Location	R122 Naul Road/ L1360 Roundabout
Site number	1
Date	16/07/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Akshai
Description	

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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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base 2025	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base 2025	PM	ONE HOUR	16:30	18:00	15	✓
D3	DN 2027	AM	ONE HOUR	07:45	09:15	15	✓
D4	DN 2027	PM	ONE HOUR	16:30	18:00	15	✓
D5	DN 2032	AM	ONE HOUR	07:45	09:15	15	✓
D6	DN 2032	PM	ONE HOUR	16:30	18:00	15	✓
D7	DN 2042	AM	ONE HOUR	07:45	09:15	15	✓
D8	DN 2042	PM	ONE HOUR	16:30	18:00	15	✓
D9	DM 2027	AM	ONE HOUR	07:45	09:15	15	✓
D10	DM 2027	PM	ONE HOUR	16:30	18:00	15	✓
D11	DM 2032	AM	ONE HOUR	07:45	09:15	15	✓
D12	DM 2032	PM	ONE HOUR	16:30	18:00	15	✓
D13	DM 2042	AM	ONE HOUR	07:45	09:15	15	✓
D14	DM 2042	PM	ONE HOUR	16:30	18:00	15	✓
D15	DS 2027	AM	ONE HOUR	07:45	09:15	15	✓
D16	DS 2027	PM	ONE HOUR	16:30	18:00	15	✓
D17	DS 2032	AM	ONE HOUR	07:45	09:15	15	✓
D18	DS 2032	PM	ONE HOUR	16:30	18:00	15	✓
D19	DS 2042	AM	ONE HOUR	07:45	09:15	15	✓
D20	DS 2042	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

Base 2025, AM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.93	40.13	10.9	E	875	1312
2 - M1 On Slip						
3 - R122(WSW)	0.56	6.30	1.4	A	654	980
4 - M1 Off Slip	0.41	7.09	0.7	A	315	472

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	718	179	128	1164	0.616	711	664	0.0	1.7	8.432	A
2 - M1 On Slip			287				552				
3 - R122(WSW)	536	134	2	1401	0.383	534	285	0.0	0.7	4.466	A
4 - M1 Off Slip	258	65	536	1077	0.240	257	0	0.0	0.3	4.692	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	857	214	154	1150	0.745	852	796	1.7	3.0	12.787	B
2 - M1 On Slip			344				661				
3 - R122(WSW)	640	160	3	1401	0.457	639	341	0.7	0.9	5.097	A
4 - M1 Off Slip	308	77	642	1011	0.305	308	0	0.3	0.5	5.476	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1049	262	188	1130	0.929	1024	974	3.0	9.4	30.949	D
2 - M1 On Slip			414				797				
3 - R122(WSW)	784	196	3	1401	0.560	782	411	0.9	1.4	6.267	A
4 - M1 Off Slip	377	94	786	923	0.409	376	0	0.5	0.7	7.044	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1049	262	188	1129	0.929	1043	976	9.4	10.9	40.129	E
2 - M1 On Slip			422				810				
3 - R122(WSW)	784	196	3	1401	0.560	784	418	1.4	1.4	6.305	A
4 - M1 Off Slip	377	94	787	921	0.410	377	0	0.7	0.7	7.086	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	857	214	154	1149	0.746	887	800	10.9	3.3	16.306	C
2 - M1 On Slip			357				684				
3 - R122(WSW)	640	160	3	1401	0.457	642	354	1.4	0.9	5.135	A
4 - M1 Off Slip	308	77	645	1010	0.305	309	0	0.7	0.5	5.512	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	718	179	129	1164	0.617	724	669	3.3	1.8	8.936	A
2 - M1 On Slip			292				561				
3 - R122(WSW)	536	134	2	1401	0.383	537	290	0.9	0.7	4.503	A
4 - M1 Off Slip	258	65	539	1075	0.240	259	0	0.5	0.3	4.726	A

Base 2025, PM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.68	9.78	2.2	A	676	1014
2 - M1 On Slip						
3 - R122(WSW)	0.67	7.94	2.1	A	785	1178
4 - M1 Off Slip	0.24	5.76	0.3	A	166	249

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	555	139	58	1205	0.460	551	720	0.0	0.9	5.633	A
2 - M1 On Slip			343				266				
3 - R122(WSW)	644	161	1	1402	0.460	641	341	0.0	0.9	4.774	A
4 - M1 Off Slip	136	34	643	1011	0.135	136	0	0.0	0.2	4.109	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	662	166	70	1198	0.553	661	863	0.9	1.3	6.867	A
2 - M1 On Slip			411				319				
3 - R122(WSW)	770	192	2	1402	0.549	768	409	0.9	1.2	5.746	A
4 - M1 Off Slip	163	41	770	932	0.175	162	0	0.2	0.2	4.675	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	811	203	85	1189	0.682	808	1055	1.3	2.1	9.607	A
2 - M1 On Slip			503				390				
3 - R122(WSW)	942	236	2	1401	0.673	939	500	1.2	2.0	7.838	A
4 - M1 Off Slip	199	50	941	826	0.241	199	0	0.2	0.3	5.735	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	811	203	85	1189	0.682	811	1059	2.1	2.2	9.779	A
2 - M1 On Slip			505				392				
3 - R122(WSW)	942	236	2	1401	0.673	942	502	2.0	2.1	7.943	A
4 - M1 Off Slip	199	50	945	824	0.242	199	0	0.3	0.3	5.759	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	662	166	70	1198	0.553	666	868	2.2	1.3	7.001	A
2 - M1 On Slip			414				322				
3 - R122(WSW)	770	192	2	1402	0.549	773	412	2.1	1.3	5.829	A
4 - M1 Off Slip	163	41	775	929	0.175	163	0	0.3	0.2	4.699	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	555	139	58	1205	0.460	556	725	1.3	0.9	5.721	A
2 - M1 On Slip			346				269				
3 - R122(WSW)	644	161	2	1402	0.460	646	345	1.3	0.9	4.837	A
4 - M1 Off Slip	136	34	647	1008	0.135	136	0	0.2	0.2	4.132	A

DN 2027, AM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.97	58.06	16.8	F	908	1362
2 - M1 On Slip						
3 - R122(WSW)	0.58	6.63	1.5	A	679	1018
4 - M1 Off Slip	0.43	7.55	0.8	A	327	490

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	745	186	133	1161	0.642	738	690	0.0	1.9	9.000	A
2 - M1 On Slip			298				572				
3 - R122(WSW)	557	139	2	1401	0.397	554	296	0.0	0.7	4.574	A
4 - M1 Off Slip	268	67	556	1064	0.252	267	0	0.0	0.4	4.828	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	890	222	160	1146	0.776	883	826	1.9	3.5	14.396	B
2 - M1 On Slip			357				686				
3 - R122(WSW)	665	166	3	1401	0.475	664	355	0.7	1.0	5.266	A
4 - M1 Off Slip	320	80	667	996	0.321	319	0	0.4	0.5	5.698	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1090	272	195	1125	0.968	1051	1011	3.5	13.2	39.579	E
2 - M1 On Slip			427				820				
3 - R122(WSW)	814	204	3	1401	0.581	812	423	1.0	1.5	6.585	A
4 - M1 Off Slip	392	98	816	904	0.434	391	0	0.5	0.8	7.500	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1090	272	196	1125	0.969	1075	1014	13.2	16.8	58.060	F
2 - M1 On Slip			435				836				
3 - R122(WSW)	814	204	3	1401	0.581	814	432	1.5	1.5	6.629	A
4 - M1 Off Slip	392	98	818	903	0.434	392	0	0.8	0.8	7.554	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	890	222	160	1146	0.777	941	831	16.8	4.0	22.689	C
2 - M1 On Slip			378				723				
3 - R122(WSW)	665	166	3	1401	0.475	667	375	1.5	1.0	5.312	A
4 - M1 Off Slip	320	80	670	994	0.322	321	0	0.8	0.5	5.747	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	745	186	134	1161	0.642	753	695	4.0	2.0	9.700	A
2 - M1 On Slip			304				583				
3 - R122(WSW)	557	139	2	1401	0.397	558	302	1.0	0.7	4.615	A
4 - M1 Off Slip	268	67	560	1062	0.252	269	0	0.5	0.4	4.869	A

DN 2027, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.71	10.68	2.5	B	701	1052
2 - M1 On Slip						
3 - R122(WSW)	0.70	8.59	2.3	A	814	1222
4 - M1 Off Slip	0.26	6.04	0.3	A	172	258

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	575	144	60	1204	0.478	572	746	0.0	0.9	5.822	A
2 - M1 On Slip			356				276				
3 - R122(WSW)	668	167	2	1402	0.477	665	354	0.0	0.9	4.925	A
4 - M1 Off Slip	141	35	666	997	0.142	141	0	0.0	0.2	4.203	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	687	172	72	1197	0.574	685	894	0.9	1.4	7.210	A
2 - M1 On Slip			426				331				
3 - R122(WSW)	798	199	2	1401	0.569	796	424	0.9	1.3	6.011	A
4 - M1 Off Slip	169	42	798	915	0.184	168	0	0.2	0.2	4.822	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	841	210	88	1188	0.709	837	1094	1.4	2.4	10.441	B
2 - M1 On Slip			521				405				
3 - R122(WSW)	977	244	2	1401	0.697	973	518	1.3	2.3	8.450	A
4 - M1 Off Slip	207	52	976	805	0.257	206	0	0.2	0.3	6.005	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	841	210	89	1187	0.709	841	1097	2.4	2.5	10.677	B
2 - M1 On Slip			523				407				
3 - R122(WSW)	977	244	2	1401	0.697	977	521	2.3	2.3	8.591	A
4 - M1 Off Slip	207	52	979	803	0.257	207	0	0.3	0.3	6.037	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	687	172	73	1197	0.574	691	900	2.5	1.4	7.381	A
2 - M1 On Slip			430				334				
3 - R122(WSW)	798	199	2	1401	0.569	802	428	2.3	1.4	6.120	A
4 - M1 Off Slip	169	42	804	912	0.185	169	0	0.3	0.2	4.853	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	575	144	61	1204	0.478	577	752	1.4	1.0	5.928	A
2 - M1 On Slip			359				279				
3 - R122(WSW)	668	167	2	1402	0.477	670	357	1.4	0.9	4.997	A
4 - M1 Off Slip	141	35	671	993	0.142	141	0	0.2	0.2	4.229	A

DN 2032, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	1.05	120.92	41.7	F	974	1461
2 - M1 On Slip						
3 - R122(WSW)	0.62	7.37	1.8	A	728	1092
4 - M1 Off Slip	0.49	8.74	1.0	A	350	526

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	799	200	143	1156	0.692	790	739	0.0	2.3	10.357	B
2 - M1 On Slip			320				613				
3 - R122(WSW)	597	149	2	1401	0.426	594	318	0.0	0.8	4.799	A
4 - M1 Off Slip	287	72	597	1040	0.277	286	0	0.0	0.4	5.156	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	954	239	171	1139	0.838	944	886	2.3	4.9	18.877	C
2 - M1 On Slip			383				732				
3 - R122(WSW)	713	178	3	1401	0.509	712	380	0.8	1.1	5.633	A
4 - M1 Off Slip	343	86	715	966	0.355	343	0	0.4	0.6	6.239	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1169	292	210	1117	1.046	1085	1084	4.9	26.0	64.511	F
2 - M1 On Slip			443				851				
3 - R122(WSW)	874	218	3	1401	0.624	871	440	1.1	1.8	7.303	A
4 - M1 Off Slip	420	105	874	868	0.484	419	0	0.6	1.0	8.645	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1169	292	210	1117	1.047	1106	1087	26.0	41.7	120.917	F
2 - M1 On Slip			451				865				
3 - R122(WSW)	874	218	3	1400	0.624	873	447	1.8	1.8	7.372	A
4 - M1 Off Slip	420	105	877	866	0.485	420	0	1.0	1.0	8.737	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	954	239	172	1139	0.838	1092	892	41.7	7.4	81.190	F
2 - M1 On Slip			436				827				
3 - R122(WSW)	713	178	3	1401	0.509	716	433	1.8	1.1	5.699	A
4 - M1 Off Slip	343	86	719	964	0.356	345	0	1.0	0.6	6.313	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	799	200	144	1155	0.692	819	745	7.4	2.5	12.152	B
2 - M1 On Slip			331				632				
3 - R122(WSW)	597	149	3	1401	0.426	599	328	1.1	0.8	4.853	A
4 - M1 Off Slip	287	72	601	1037	0.277	288	0	0.6	0.4	5.209	A

DN 2032, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.76	13.08	3.2	B	750	1126
2 - M1 On Slip						
3 - R122(WSW)	0.75	10.31	2.9	B	871	1306
4 - M1 Off Slip	0.29	6.66	0.4	A	184	276

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	616	154	64	1201	0.512	611	797	0.0	1.1	6.265	A
2 - M1 On Slip			380				296				
3 - R122(WSW)	714	179	2	1402	0.510	710	378	0.0	1.1	5.296	A
4 - M1 Off Slip	151	38	712	968	0.156	150	0	0.0	0.2	4.397	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	735	184	77	1194	0.616	733	956	1.1	1.6	8.035	A
2 - M1 On Slip			456				354				
3 - R122(WSW)	853	213	2	1401	0.609	851	454	1.1	1.6	6.666	A
4 - M1 Off Slip	180	45	853	881	0.205	180	0	0.2	0.3	5.132	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	900	225	94	1184	0.760	894	1168	1.6	3.1	12.596	B
2 - M1 On Slip			556				433				
3 - R122(WSW)	1045	261	2	1401	0.746	1040	554	1.6	2.9	10.038	B
4 - M1 Off Slip	221	55	1042	764	0.289	220	0	0.3	0.4	6.611	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	900	225	95	1184	0.761	900	1173	3.1	3.2	13.077	B
2 - M1 On Slip			560				435				
3 - R122(WSW)	1045	261	2	1401	0.746	1045	557	2.9	2.9	10.311	B
4 - M1 Off Slip	221	55	1047	761	0.290	221	0	0.4	0.4	6.662	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	735	184	78	1194	0.616	741	963	3.2	1.7	8.331	A
2 - M1 On Slip			461				358				
3 - R122(WSW)	853	213	2	1401	0.609	858	459	2.9	1.6	6.848	A
4 - M1 Off Slip	180	45	860	876	0.206	181	0	0.4	0.3	5.178	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	616	154	65	1201	0.513	618	804	1.7	1.1	6.410	A
2 - M1 On Slip			384				299				
3 - R122(WSW)	714	179	2	1402	0.510	717	383	1.6	1.1	5.395	A
4 - M1 Off Slip	151	38	718	964	0.156	151	0	0.3	0.2	4.430	A

DN 2042, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	1.13	225.79	81.8	F	1041	1561
2 - M1 On Slip						
3 - R122(WSW)	0.67	8.39	2.1	A	778	1167
4 - M1 Off Slip	0.54	10.26	1.3	B	374	562

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	854	213	153	1150	0.743	842	790	0.0	3.0	12.284	B
2 - M1 On Slip			343				652				
3 - R122(WSW)	638	160	3	1401	0.456	635	340	0.0	0.9	5.097	A
4 - M1 Off Slip	307	77	637	1014	0.303	305	0	0.0	0.5	5.486	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1020	255	183	1132	0.901	1001	946	3.0	7.6	26.618	D
2 - M1 On Slip			408				777				
3 - R122(WSW)	762	191	3	1401	0.544	761	405	0.9	1.3	6.115	A
4 - M1 Off Slip	367	92	764	936	0.392	366	0	0.5	0.7	6.828	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1249	312	224	1109	1.127	1095	1156	7.6	46.0	100.991	F
2 - M1 On Slip			452				868				
3 - R122(WSW)	934	233	3	1401	0.667	930	448	1.3	2.1	8.281	A
4 - M1 Off Slip	449	112	934	831	0.541	447	0	0.7	1.2	10.096	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1249	312	225	1108	1.127	1106	1161	46.0	81.8	216.743	F
2 - M1 On Slip			456				875				
3 - R122(WSW)	934	233	3	1400	0.667	933	452	2.1	2.1	8.395	A
4 - M1 Off Slip	449	112	937	829	0.542	449	0	1.2	1.3	10.263	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1020	255	185	1132	0.901	1117	953	81.8	57.6	225.790	F
2 - M1 On Slip			450				851				
3 - R122(WSW)	762	191	3	1400	0.544	766	447	2.1	1.3	6.212	A
4 - M1 Off Slip	367	92	769	933	0.393	369	0	1.3	0.7	6.945	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	854	213	154	1149	0.743	1069	797	57.6	3.7	85.942	F
2 - M1 On Slip			425				798				
3 - R122(WSW)	638	160	3	1401	0.456	640	422	1.3	0.9	5.168	A
4 - M1 Off Slip	307	77	643	1011	0.304	308	0	0.7	0.5	5.557	A

DN 2042, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.81	16.65	4.3	C	799	1198
2 - M1 On Slip						
3 - R122(WSW)	0.79	12.61	3.8	B	926	1388
4 - M1 Off Slip	0.33	7.40	0.5	A	195	293

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	655	164	69	1199	0.547	650	847	0.0	1.2	6.755	A
2 - M1 On Slip			404				315				
3 - R122(WSW)	759	190	2	1402	0.542	755	402	0.0	1.2	5.652	A
4 - M1 Off Slip	160	40	756	941	0.170	159	0	0.0	0.2	4.602	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	782	196	82	1191	0.657	780	1015	1.2	1.9	9.021	A
2 - M1 On Slip			484				378				
3 - R122(WSW)	907	227	2	1401	0.647	904	482	1.2	1.8	7.372	A
4 - M1 Off Slip	191	48	906	848	0.225	191	0	0.2	0.3	5.476	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	958	240	101	1180	0.812	949	1239	1.9	4.1	15.612	C
2 - M1 On Slip			590				460				
3 - R122(WSW)	1111	278	3	1401	0.793	1103	588	1.8	3.7	12.072	B
4 - M1 Off Slip	234	59	1106	725	0.323	233	0	0.3	0.5	7.319	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	958	240	101	1180	0.812	957	1246	4.1	4.3	16.655	C
2 - M1 On Slip			595				464				
3 - R122(WSW)	1111	278	3	1401	0.793	1110	592	3.7	3.8	12.613	B
4 - M1 Off Slip	234	59	1113	720	0.325	234	0	0.5	0.5	7.405	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	782	196	83	1191	0.657	791	1025	4.3	2.0	9.562	A
2 - M1 On Slip			491				383				
3 - R122(WSW)	907	227	2	1401	0.647	914	489	3.8	1.9	7.677	A
4 - M1 Off Slip	191	48	916	842	0.227	192	0	0.5	0.3	5.547	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	655	164	69	1198	0.547	658	855	2.0	1.3	6.959	A
2 - M1 On Slip			409				319				
3 - R122(WSW)	759	190	2	1402	0.542	762	407	1.9	1.2	5.785	A
4 - M1 Off Slip	160	40	764	936	0.171	160	0	0.3	0.2	4.643	A

DM 2027, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	1.10	182.07	68.4	F	1032	1548
2 - M1 On Slip						
3 - R122(WSW)	0.61	7.04	1.7	A	711	1066
4 - M1 Off Slip	0.45	8.04	0.9	A	333	499

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	847	212	133	1161	0.729	836	721	0.0	2.7	11.415	B
2 - M1 On Slip			333				636				
3 - R122(WSW)	583	146	2	1401	0.416	580	331	0.0	0.8	4.682	A
4 - M1 Off Slip	273	68	583	1048	0.260	271	0	0.0	0.4	4.958	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1011	253	160	1146	0.882	996	864	2.7	6.6	23.355	C
2 - M1 On Slip			397				759				
3 - R122(WSW)	696	174	3	1401	0.497	695	394	0.8	1.0	5.457	A
4 - M1 Off Slip	326	81	698	977	0.334	325	0	0.4	0.5	5.917	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1239	310	195	1125	1.100	1108	1056	6.6	39.2	87.206	F
2 - M1 On Slip			446				857				
3 - R122(WSW)	853	213	3	1401	0.609	851	443	1.0	1.6	6.980	A
4 - M1 Off Slip	399	100	854	880	0.453	398	0	0.5	0.9	7.968	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1239	310	196	1125	1.101	1122	1059	39.2	68.4	182.070	F
2 - M1 On Slip			451				867				
3 - R122(WSW)	853	213	3	1401	0.609	853	448	1.6	1.7	7.038	A
4 - M1 Off Slip	399	100	856	879	0.454	399	0	0.9	0.9	8.036	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1011	253	160	1146	0.883	1128	869	68.4	39.2	174.080	F
2 - M1 On Slip			445				844				
3 - R122(WSW)	696	174	3	1401	0.497	699	442	1.7	1.1	5.515	A
4 - M1 Off Slip	326	81	702	974	0.334	327	0	0.9	0.5	5.973	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	847	212	134	1161	0.730	991	727	39.2	3.1	40.162	E
2 - M1 On Slip			389				736				
3 - R122(WSW)	583	146	3	1401	0.416	584	386	1.1	0.8	4.732	A
4 - M1 Off Slip	273	68	587	1045	0.261	273	0	0.5	0.4	5.002	A

DM 2027, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.77	13.76	3.4	B	767	1150
2 - M1 On Slip						
3 - R122(WSW)	0.76	10.82	3.1	B	888	1332
4 - M1 Off Slip	0.33	7.21	0.5	A	208	312

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	629	157	60	1204	0.522	624	835	0.0	1.1	6.342	A
2 - M1 On Slip			386				298				
3 - R122(WSW)	728	182	2	1402	0.520	724	385	0.0	1.1	5.347	A
4 - M1 Off Slip	171	43	726	960	0.178	170	0	0.0	0.2	4.552	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	751	188	72	1197	0.627	749	1001	1.1	1.7	8.213	A
2 - M1 On Slip			463				358				
3 - R122(WSW)	870	217	2	1401	0.621	868	461	1.1	1.6	6.800	A
4 - M1 Off Slip	204	51	869	871	0.234	203	0	0.2	0.3	5.392	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	920	230	88	1188	0.775	913	1222	1.7	3.3	13.181	B
2 - M1 On Slip			565				436				
3 - R122(WSW)	1065	266	2	1401	0.760	1059	563	1.6	3.1	10.489	B
4 - M1 Off Slip	249	62	1062	752	0.332	249	0	0.3	0.5	7.146	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	920	230	89	1187	0.775	919	1228	3.3	3.4	13.757	B
2 - M1 On Slip			569				439				
3 - R122(WSW)	1065	266	2	1401	0.760	1065	567	3.1	3.1	10.818	B
4 - M1 Off Slip	249	62	1067	748	0.333	249	0	0.5	0.5	7.215	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	751	188	73	1197	0.628	758	1009	3.4	1.8	8.554	A
2 - M1 On Slip			469				362				
3 - R122(WSW)	870	217	2	1401	0.621	875	467	3.1	1.7	7.006	A
4 - M1 Off Slip	204	51	877	866	0.235	204	0	0.5	0.3	5.450	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	629	157	61	1203	0.523	631	842	1.8	1.1	6.498	A
2 - M1 On Slip			391				301				
3 - R122(WSW)	728	182	2	1402	0.520	731	389	1.7	1.1	5.454	A
4 - M1 Off Slip	171	43	732	956	0.179	171	0	0.3	0.2	4.591	A

DM 2032, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	1.18	339.87	113.1	F	1098	1647
2 - M1 On Slip						
3 - R122(WSW)	0.65	7.95	2.0	A	760	1141
4 - M1 Off Slip	0.51	9.38	1.1	A	356	534

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	901	225	143	1156	0.780	887	770	0.0	3.5	13.660	B
2 - M1 On Slip			354				676				
3 - R122(WSW)	624	156	2	1401	0.445	620	352	0.0	0.9	4.957	A
4 - M1 Off Slip	292	73	623	1023	0.286	291	0	0.0	0.4	5.304	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1076	269	171	1139	0.944	1047	923	3.5	10.7	34.051	D
2 - M1 On Slip			419				800				
3 - R122(WSW)	745	186	3	1401	0.532	743	416	0.9	1.2	5.899	A
4 - M1 Off Slip	349	87	746	947	0.369	348	0	0.4	0.6	6.498	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1318	329	209	1117	1.180	1110	1128	10.7	62.6	130.591	F
2 - M1 On Slip			451				869				
3 - R122(WSW)	912	228	3	1401	0.651	909	448	1.2	2.0	7.860	A
4 - M1 Off Slip	427	107	912	844	0.506	426	0	0.6	1.1	9.263	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1318	329	210	1117	1.180	1116	1132	62.6	113.1	290.346	F
2 - M1 On Slip			453				873				
3 - R122(WSW)	912	228	3	1401	0.651	912	450	2.0	2.0	7.953	A
4 - M1 Off Slip	427	107	915	842	0.507	427	0	1.1	1.1	9.382	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1076	269	172	1139	0.945	1128	929	113.1	100.1	339.866	F
2 - M1 On Slip			448				852				
3 - R122(WSW)	745	186	3	1401	0.532	748	445	2.0	1.2	5.983	A
4 - M1 Off Slip	349	87	751	944	0.370	351	0	1.1	0.6	6.585	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	901	225	144	1155	0.780	1143	777	100.1	39.7	223.082	F
2 - M1 On Slip			447				840				
3 - R122(WSW)	624	156	3	1401	0.445	625	444	1.2	0.9	5.024	A
4 - M1 Off Slip	292	73	628	1020	0.287	293	0	0.6	0.4	5.366	A

DM 2032, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.83	17.79	4.7	C	816	1223
2 - M1 On Slip						
3 - R122(WSW)	0.81	13.49	4.1	B	944	1416
4 - M1 Off Slip	0.37	8.12	0.6	A	220	330

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	669	167	64	1201	0.557	664	886	0.0	1.3	6.826	A
2 - M1 On Slip			411				318				
3 - R122(WSW)	775	194	2	1402	0.553	770	409	0.0	1.2	5.728	A
4 - M1 Off Slip	180	45	771	931	0.193	179	0	0.0	0.2	4.780	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	799	200	77	1194	0.669	796	1062	1.3	2.0	9.231	A
2 - M1 On Slip			493				381				
3 - R122(WSW)	925	231	2	1401	0.660	922	491	1.2	1.9	7.568	A
4 - M1 Off Slip	215	54	924	837	0.257	215	0	0.2	0.3	5.783	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	979	245	94	1184	0.826	969	1295	2.0	4.4	16.491	C
2 - M1 On Slip			600				463				
3 - R122(WSW)	1133	283	2	1401	0.808	1124	597	1.9	4.0	12.811	B
4 - M1 Off Slip	264	66	1127	711	0.370	263	0	0.3	0.6	8.004	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	979	245	95	1184	0.827	978	1303	4.4	4.7	17.787	C
2 - M1 On Slip			605				468				
3 - R122(WSW)	1133	283	2	1401	0.808	1132	603	4.0	4.1	13.494	B
4 - M1 Off Slip	264	66	1135	707	0.373	264	0	0.6	0.6	8.123	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	799	200	78	1193	0.669	809	1073	4.7	2.1	9.867	A
2 - M1 On Slip			500				387				
3 - R122(WSW)	925	231	2	1401	0.660	933	498	4.1	2.0	7.928	A
4 - M1 Off Slip	215	54	935	830	0.259	216	0	0.6	0.4	5.873	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	669	167	65	1201	0.557	672	895	2.1	1.3	7.046	A
2 - M1 On Slip			416				322				
3 - R122(WSW)	775	194	2	1402	0.553	778	414	2.0	1.3	5.875	A
4 - M1 Off Slip	180	45	779	927	0.195	181	0	0.4	0.2	4.828	A

DM 2042, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	1.26	530.78	167.4	F	1165	1747
2 - M1 On Slip						
3 - R122(WSW)	0.69	9.08	2.4	A	810	1216
4 - M1 Off Slip	0.57	11.16	1.4	B	380	570

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	956	239	153	1150	0.831	937	821	0.0	4.7	16.944	C
2 - M1 On Slip			376				714				
3 - R122(WSW)	665	166	3	1401	0.475	661	373	0.0	1.0	5.234	A
4 - M1 Off Slip	312	78	664	998	0.313	310	0	0.0	0.5	5.650	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1141	285	183	1132	1.008	1084	983	4.7	19.0	51.839	F
2 - M1 On Slip			437				831				
3 - R122(WSW)	794	198	3	1401	0.567	792	434	1.0	1.4	6.379	A
4 - M1 Off Slip	373	93	795	917	0.406	372	0	0.5	0.7	7.139	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1398	349	224	1109	1.261	1106	1201	19.0	91.9	190.664	F
2 - M1 On Slip			454				876				
3 - R122(WSW)	972	243	3	1401	0.694	968	451	1.4	2.4	8.922	A
4 - M1 Off Slip	456	114	971	808	0.565	454	0	0.7	1.4	10.937	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1398	349	225	1108	1.261	1108	1206	91.9	164.4	420.703	F
2 - M1 On Slip			455				878				
3 - R122(WSW)	972	243	3	1401	0.694	972	452	2.4	2.4	9.076	A
4 - M1 Off Slip	456	114	975	805	0.567	456	0	1.4	1.4	11.159	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1141	285	185	1132	1.009	1129	991	164.4	167.4	530.783	F
2 - M1 On Slip			453				861				
3 - R122(WSW)	794	198	3	1401	0.567	798	450	2.4	1.4	6.498	A
4 - M1 Off Slip	373	93	801	913	0.408	375	0	1.4	0.8	7.279	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	956	239	154	1149	0.832	1142	828	167.4	120.9	455.326	F
2 - M1 On Slip			450				846				
3 - R122(WSW)	665	166	3	1401	0.475	667	447	1.4	1.0	5.316	A
4 - M1 Off Slip	312	78	670	994	0.314	313	0	0.8	0.5	5.733	A

DM 2042, PM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.88	24.76	6.7	C	864	1296
2 - M1 On Slip						
3 - R122(WSW)	0.86	17.82	5.7	C	999	1498
4 - M1 Off Slip	0.42	9.25	0.7	A	231	346

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	709	177	69	1199	0.591	703	935	0.0	1.5	7.422	A
2 - M1 On Slip			435				337				
3 - R122(WSW)	820	205	2	1402	0.585	814	433	0.0	1.4	6.208	A
4 - M1 Off Slip	189	47	816	904	0.210	188	0	0.0	0.3	5.023	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	846	212	82	1191	0.711	842	1121	1.5	2.4	10.557	B
2 - M1 On Slip			521				404				
3 - R122(WSW)	979	245	2	1401	0.698	975	519	1.4	2.3	8.567	A
4 - M1 Off Slip	226	57	977	804	0.281	226	0	0.3	0.4	6.220	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1037	259	100	1181	0.878	1021	1364	2.4	6.2	21.550	C
2 - M1 On Slip			632				490				
3 - R122(WSW)	1199	300	2	1401	0.855	1186	630	2.3	5.4	16.256	C
4 - M1 Off Slip	277	69	1189	673	0.412	276	0	0.4	0.7	9.035	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1037	259	101	1180	0.878	1034	1376	6.2	6.7	24.760	C
2 - M1 On Slip			640				496				
3 - R122(WSW)	1199	300	3	1401	0.855	1197	637	5.4	5.7	17.824	C
4 - M1 Off Slip	277	69	1200	666	0.416	277	0	0.7	0.7	9.247	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	846	212	83	1190	0.711	863	1138	6.7	2.6	11.886	B
2 - M1 On Slip			533				413				
3 - R122(WSW)	979	245	2	1401	0.698	992	531	5.7	2.4	9.258	A
4 - M1 Off Slip	226	57	994	794	0.285	227	0	0.7	0.4	6.371	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	709	177	69	1198	0.591	713	946	2.6	1.5	7.742	A
2 - M1 On Slip			441				342				
3 - R122(WSW)	820	205	2	1402	0.585	823	439	2.4	1.5	6.415	A
4 - M1 Off Slip	189	47	825	898	0.211	190	0	0.4	0.3	5.087	A

DS 2027, AM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	1.13	240.25	86.5	F	1063	1594
2 - M1 On Slip						
3 - R122(WSW)	0.62	7.16	1.7	A	719	1078
4 - M1 Off Slip	0.46	8.16	0.9	A	334	501

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	872	218	133	1161	0.751	860	728	0.0	3.0	12.257	B
2 - M1 On Slip			341				652				
3 - R122(WSW)	590	147	2	1401	0.421	587	339	0.0	0.8	4.717	A
4 - M1 Off Slip	274	68	589	1044	0.262	272	0	0.0	0.4	4.991	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1041	260	160	1146	0.909	1022	873	3.0	8.0	27.144	D
2 - M1 On Slip			406				775				
3 - R122(WSW)	704	176	3	1401	0.503	703	403	0.8	1.1	5.518	A
4 - M1 Off Slip	327	82	706	972	0.337	326	0	0.4	0.5	5.971	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1275	319	195	1125	1.133	1114	1067	8.0	48.5	103.674	F
2 - M1 On Slip			448				861				
3 - R122(WSW)	862	216	3	1401	0.616	860	445	1.1	1.7	7.099	A
4 - M1 Off Slip	401	100	863	875	0.458	399	0	0.5	0.9	8.091	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1275	319	196	1125	1.134	1123	1070	48.5	86.5	224.653	F
2 - M1 On Slip			451				868				
3 - R122(WSW)	862	216	3	1401	0.616	862	448	1.7	1.7	7.161	A
4 - M1 Off Slip	401	100	865	873	0.459	401	0	0.9	0.9	8.163	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1041	260	160	1146	0.909	1132	878	86.5	64.0	240.247	F
2 - M1 On Slip			446				846				
3 - R122(WSW)	704	176	3	1401	0.503	707	443	1.7	1.1	5.575	A
4 - M1 Off Slip	327	82	710	970	0.337	329	0	0.9	0.6	6.031	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	872	218	134	1161	0.751	1112	734	64.0	4.0	103.962	F
2 - M1 On Slip			432				814				
3 - R122(WSW)	590	147	3	1401	0.421	591	429	1.1	0.8	4.771	A
4 - M1 Off Slip	274	68	594	1041	0.263	275	0	0.6	0.4	5.037	A

DS 2027, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.79	14.81	3.8	B	783	1174
2 - M1 On Slip						
3 - R122(WSW)	0.78	11.55	3.4	B	906	1359
4 - M1 Off Slip	0.35	7.58	0.5	A	217	325

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	642	161	60	1204	0.534	638	857	0.0	1.2	6.487	A
2 - M1 On Slip			394				304				
3 - R122(WSW)	743	186	2	1402	0.530	739	393	0.0	1.1	5.462	A
4 - M1 Off Slip	178	44	740	951	0.187	177	0	0.0	0.2	4.645	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	767	192	72	1197	0.641	764	1027	1.2	1.8	8.507	A
2 - M1 On Slip			472				364				
3 - R122(WSW)	887	222	2	1401	0.633	885	471	1.1	1.7	7.027	A
4 - M1 Off Slip	212	53	887	860	0.247	212	0	0.2	0.3	5.551	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	939	235	88	1188	0.791	932	1254	1.8	3.6	14.078	B
2 - M1 On Slip			576				444				
3 - R122(WSW)	1087	272	2	1401	0.776	1080	574	1.7	3.3	11.138	B
4 - M1 Off Slip	260	65	1083	739	0.352	259	0	0.3	0.5	7.491	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	939	235	89	1187	0.791	939	1260	3.6	3.8	14.811	B
2 - M1 On Slip			580				447				
3 - R122(WSW)	1087	272	2	1401	0.776	1086	578	3.3	3.4	11.548	B
4 - M1 Off Slip	260	65	1089	735	0.354	260	0	0.5	0.5	7.577	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	767	192	73	1197	0.641	774	1036	3.8	1.9	8.918	A
2 - M1 On Slip			478				369				
3 - R122(WSW)	887	222	2	1401	0.633	894	476	3.4	1.8	7.270	A
4 - M1 Off Slip	212	53	896	854	0.249	213	0	0.5	0.3	5.622	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	642	161	61	1203	0.534	645	865	1.9	1.2	6.659	A
2 - M1 On Slip			399				307				
3 - R122(WSW)	743	186	2	1402	0.530	746	397	1.8	1.2	5.578	A
4 - M1 Off Slip	178	44	747	946	0.188	178	0	0.3	0.2	4.688	A

DS 2032, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	1.21	415.08	133.6	F	1129	1693
2 - M1 On Slip						
3 - R122(WSW)	0.66	8.11	2.1	A	768	1152
4 - M1 Off Slip	0.51	9.55	1.1	A	358	536

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	926	232	143	1156	0.801	910	778	0.0	4.0	14.824	B
2 - M1 On Slip			363				691				
3 - R122(WSW)	630	158	2	1401	0.450	627	360	0.0	0.9	4.999	A
4 - M1 Off Slip	293	73	629	1019	0.288	292	0	0.0	0.4	5.339	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1106	276	171	1139	0.971	1068	932	4.0	13.5	40.322	E
2 - M1 On Slip			426				813				
3 - R122(WSW)	753	188	3	1401	0.537	751	423	0.9	1.2	5.970	A
4 - M1 Off Slip	350	88	754	942	0.372	350	0	0.4	0.6	6.565	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1354	339	209	1117	1.212	1112	1139	13.5	74.0	152.628	F
2 - M1 On Slip			451				870				
3 - R122(WSW)	922	230	3	1401	0.658	919	448	1.2	2.0	8.008	A
4 - M1 Off Slip	429	107	922	838	0.512	427	0	0.6	1.1	9.426	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1354	339	210	1117	1.213	1116	1144	74.0	133.6	340.579	F
2 - M1 On Slip			453				873				
3 - R122(WSW)	922	230	3	1401	0.658	922	450	2.0	2.1	8.108	A
4 - M1 Off Slip	429	107	925	837	0.513	429	0	1.1	1.1	9.553	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1106	276	172	1139	0.971	1130	939	133.6	121.9	415.080	F
2 - M1 On Slip			449				853				
3 - R122(WSW)	753	188	3	1401	0.537	756	446	2.1	1.3	6.054	A
4 - M1 Off Slip	350	88	759	939	0.373	352	0	1.1	0.7	6.655	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	926	232	144	1155	0.802	1146	785	127.6	72.8	316.695	F
2 - M1 On Slip			448				842				
3 - R122(WSW)	630	158	3	1401	0.450	632	445	1.3	0.9	5.064	A
4 - M1 Off Slip	293	73	635	1016	0.289	294	0	0.7	0.4	5.402	A

DS 2032, PM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.84	19.55	5.2	C	832	1248
2 - M1 On Slip						
3 - R122(WSW)	0.82	14.63	4.5	B	962	1443
4 - M1 Off Slip	0.40	8.58	0.6	A	228	343

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	683	171	64	1201	0.568	677	908	0.0	1.3	6.994	A
2 - M1 On Slip			419				323				
3 - R122(WSW)	789	197	2	1402	0.563	784	417	0.0	1.3	5.861	A
4 - M1 Off Slip	187	47	786	922	0.203	186	0	0.0	0.3	4.885	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	815	204	77	1194	0.683	812	1088	1.3	2.1	9.602	A
2 - M1 On Slip			502				387				
3 - R122(WSW)	942	236	2	1401	0.673	940	500	1.3	2.0	7.846	A
4 - M1 Off Slip	224	56	941	826	0.271	223	0	0.3	0.4	5.969	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	998	250	94	1184	0.843	987	1326	2.1	4.9	17.841	C
2 - M1 On Slip			610				471				
3 - R122(WSW)	1154	289	2	1401	0.824	1145	608	2.0	4.4	13.751	B
4 - M1 Off Slip	274	69	1147	699	0.392	273	0	0.4	0.6	8.436	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	998	250	95	1184	0.843	997	1335	4.9	5.2	19.545	C
2 - M1 On Slip			616				476				
3 - R122(WSW)	1154	289	2	1401	0.824	1154	614	4.4	4.5	14.632	B
4 - M1 Off Slip	274	69	1156	693	0.395	274	0	0.6	0.6	8.585	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	815	204	78	1193	0.683	827	1101	5.2	2.3	10.392	B
2 - M1 On Slip			511				394				
3 - R122(WSW)	942	236	2	1401	0.673	952	509	4.5	2.1	8.285	A
4 - M1 Off Slip	224	56	954	818	0.274	225	0	0.6	0.4	6.079	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	683	171	65	1201	0.568	686	917	2.3	1.4	7.242	A
2 - M1 On Slip			424				327				
3 - R122(WSW)	789	197	2	1402	0.563	793	422	2.1	1.3	6.020	A
4 - M1 Off Slip	187	47	794	917	0.204	188	0	0.4	0.3	4.940	A

DS 2042, AM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	1.29	615.17	197.7	F	1196	1793
2 - M1 On Slip						
3 - R122(WSW)	0.70	9.28	2.5	A	818	1227
4 - M1 Off Slip	0.57	11.40	1.4	B	382	572

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	981	245	153	1150	0.853	959	828	0.0	5.4	18.639	C
2 - M1 On Slip			384				728				
3 - R122(WSW)	671	168	3	1401	0.479	667	381	0.0	1.0	5.278	A
4 - M1 Off Slip	313	78	670	994	0.315	311	0	0.0	0.5	5.692	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1171	293	183	1132	1.034	1097	992	5.4	24.0	61.359	F
2 - M1 On Slip			441				839				
3 - R122(WSW)	802	200	3	1401	0.572	800	438	1.0	1.4	6.457	A
4 - M1 Off Slip	374	93	803	912	0.410	373	0	0.5	0.7	7.218	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1435	359	224	1109	1.294	1107	1212	24.0	105.9	220.803	F
2 - M1 On Slip			454				877				
3 - R122(WSW)	982	245	3	1401	0.701	978	451	1.4	2.5	9.109	A
4 - M1 Off Slip	458	114	981	802	0.571	455	0	0.7	1.4	11.159	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1435	359	225	1108	1.295	1108	1217	105.9	187.6	479.963	F
2 - M1 On Slip			455				878				
3 - R122(WSW)	982	245	3	1401	0.701	982	452	2.5	2.5	9.276	A
4 - M1 Off Slip	458	114	984	800	0.573	458	0	1.4	1.4	11.400	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1171	293	185	1131	1.035	1131	1000	187.6	197.7	615.172	F
2 - M1 On Slip			453				862				
3 - R122(WSW)	802	200	3	1401	0.572	806	450	2.5	1.5	6.585	A
4 - M1 Off Slip	374	93	809	908	0.412	377	0	1.4	0.8	7.365	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	981	245	154	1149	0.854	1143	836	197.7	157.2	559.542	F
2 - M1 On Slip			450				847				
3 - R122(WSW)	671	168	3	1401	0.479	673	447	1.5	1.0	5.363	A
4 - M1 Off Slip	313	78	676	990	0.316	314	0	0.8	0.5	5.776	A

DS 2042, PM

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Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.89	27.99	7.7	D	880	1320
2 - M1 On Slip						
3 - R122(WSW)	0.87	19.77	6.4	C	1017	1525
4 - M1 Off Slip	0.44	9.84	0.8	A	240	360

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	722	181	69	1199	0.602	716	957	0.0	1.5	7.616	A
2 - M1 On Slip			442				342				
3 - R122(WSW)	834	209	2	1402	0.595	828	441	0.0	1.5	6.361	A
4 - M1 Off Slip	197	49	830	895	0.220	196	0	0.0	0.3	5.138	A

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	862	216	82	1191	0.724	858	1147	1.5	2.6	11.032	B
2 - M1 On Slip			530				410				
3 - R122(WSW)	996	249	2	1401	0.711	992	528	1.5	2.4	8.919	A
4 - M1 Off Slip	235	59	994	793	0.296	234	0	0.3	0.4	6.432	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1056	264	100	1181	0.894	1038	1395	2.6	7.0	23.632	C
2 - M1 On Slip			642				496				
3 - R122(WSW)	1220	305	2	1401	0.871	1206	639	2.4	6.0	17.679	C
4 - M1 Off Slip	288	72	1208	661	0.435	286	0	0.4	0.8	9.572	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	1056	264	101	1180	0.895	1053	1408	7.0	7.7	27.986	D
2 - M1 On Slip			651				503				
3 - R122(WSW)	1220	305	3	1401	0.871	1219	648	6.0	6.4	19.771	C
4 - M1 Off Slip	288	72	1221	653	0.441	288	0	0.8	0.8	9.845	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	862	216	84	1190	0.724	882	1166	7.7	2.9	12.762	B
2 - M1 On Slip			544				421				
3 - R122(WSW)	996	249	2	1401	0.711	1011	542	6.4	2.6	9.786	A
4 - M1 Off Slip	235	59	1014	782	0.301	236	0	0.8	0.4	6.619	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	722	181	69	1198	0.603	727	968	2.8	1.6	7.978	A
2 - M1 On Slip			449				347				
3 - R122(WSW)	834	209	2	1402	0.595	839	447	2.6	1.5	6.589	A
4 - M1 Off Slip	197	49	840	889	0.221	197	0	0.4	0.3	5.210	A

J15.2 – M1 /R122 Interchange Western Roundabout Modelling Report

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Junctions 9	
ARCADY 9 - Roundabout Module	
Version: 9.5.1.7462 © Copyright TRL Limited, 2019	
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Filename: 20250728-Site 15b Rbt.j9

Path: C:\Users\Akshai\Transport Insights\TI - Projects 2025\C1266 2025 Glenveagh Flemington Lane Balbriggan LRD\Modelling and Analysis\Modelling\ARCADY\Site 15 a_b M1 junction

Report generation date: 21/08/2025 11:31:09

»Base 2025, AM
 »Base 2025, PM
 »DN 2027, AM
 »DN 2027, PM
 »DN 2032, AM
 »DN 2032, PM
 »DN 2042, AM
 »DN 2042, PM
 »DM 2027, AM
 »DM 2027, PM
 »DM 2032, AM
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 »DM 2042, AM
 »DM 2042, PM
 »DS 2027, AM
 »DS 2027, PM
 »DS 2032, AM
 »DS 2032, PM
 »DS 2042, AM
 »DS 2042, PM

Summary of junction performance

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	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	Base 2025									
1 - R122(ENE)	D1	0.6	5.20	0.36	A	D2	0.8	5.40	0.42	A
2 - M1 Off Slip		0.6	4.78	0.35	A		2.4	10.37	0.71	B
3 - R122(WSW)		1.0	8.56	0.49	A		0.8	9.73	0.44	A
	DN 2027									
1 - R122(ENE)	D3	0.6	5.35	0.37	A	D4	0.8	5.55	0.44	A
2 - M1 Off Slip		0.6	4.95	0.36	A		2.9	11.82	0.74	B
3 - R122(WSW)		1.2	9.15	0.52	A		0.9	10.60	0.47	B
	DN 2032									
1 - R122(ENE)	D5	0.7	5.61	0.40	A	D6	0.9	5.87	0.47	A
2 - M1 Off Slip		0.7	5.32	0.40	A		4.1	16.13	0.81	C
3 - R122(WSW)		1.4	10.69	0.57	B		1.2	12.83	0.54	B
	DN 2042									
1 - R122(ENE)	D7	0.8	5.94	0.43	A	D8	1.0	6.25	0.50	A
2 - M1 Off Slip		0.8	5.81	0.43	A		6.6	24.77	0.88	C
3 - R122(WSW)		1.8	12.74	0.63	B		1.6	16.10	0.61	C
	DM 2027									
1 - R122(ENE)	D9	0.8	5.70	0.41	A	D10	0.9	5.96	0.48	A
2 - M1 Off Slip		0.7	5.32	0.40	A		4.1	16.03	0.81	C
3 - R122(WSW)		1.3	10.05	0.54	B		1.3	13.63	0.56	B
	DM 2032									
1 - R122(ENE)	D11	0.9	6.00	0.44	A	D12	1.1	6.34	0.51	A
2 - M1 Off Slip		0.8	5.80	0.43	A		6.5	24.65	0.88	C
3 - R122(WSW)		1.6	11.82	0.60	B		1.7	17.50	0.64	C
	DM 2042									
1 - R122(ENE)	D13	1.0	6.38	0.47	A	D14	1.2	6.74	0.54	A
2 - M1 Off Slip		1.0	6.33	0.47	A		12.5	45.09	0.95	E
3 - R122(WSW)		2.1	14.52	0.66	B		2.5	23.70	0.72	C
	DS 2027									
1 - R122(ENE)	D15	0.8	5.77	0.42	A	D16	1.0	6.08	0.49	A
2 - M1 Off Slip		0.7	5.43	0.41	A		4.5	17.54	0.82	C
3 - R122(WSW)		1.3	10.29	0.55	B		1.4	14.66	0.59	B
	DS 2032									
1 - R122(ENE)	D17	0.9	6.10	0.45	A	D18	1.1	6.46	0.52	A
2 - M1 Off Slip		0.9	5.88	0.44	A		7.5	28.09	0.89	D
3 - R122(WSW)		1.7	12.17	0.61	B		2.0	19.19	0.66	C
	DS 2042									
1 - R122(ENE)	D19	1.0	6.49	0.48	A	D20	1.2	6.89	0.55	A
2 - M1 Off Slip		1.0	6.48	0.48	A		15.3	53.75	0.96	F
3 - R122(WSW)		2.2	15.04	0.67	C		2.8	26.49	0.74	D

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

File summary

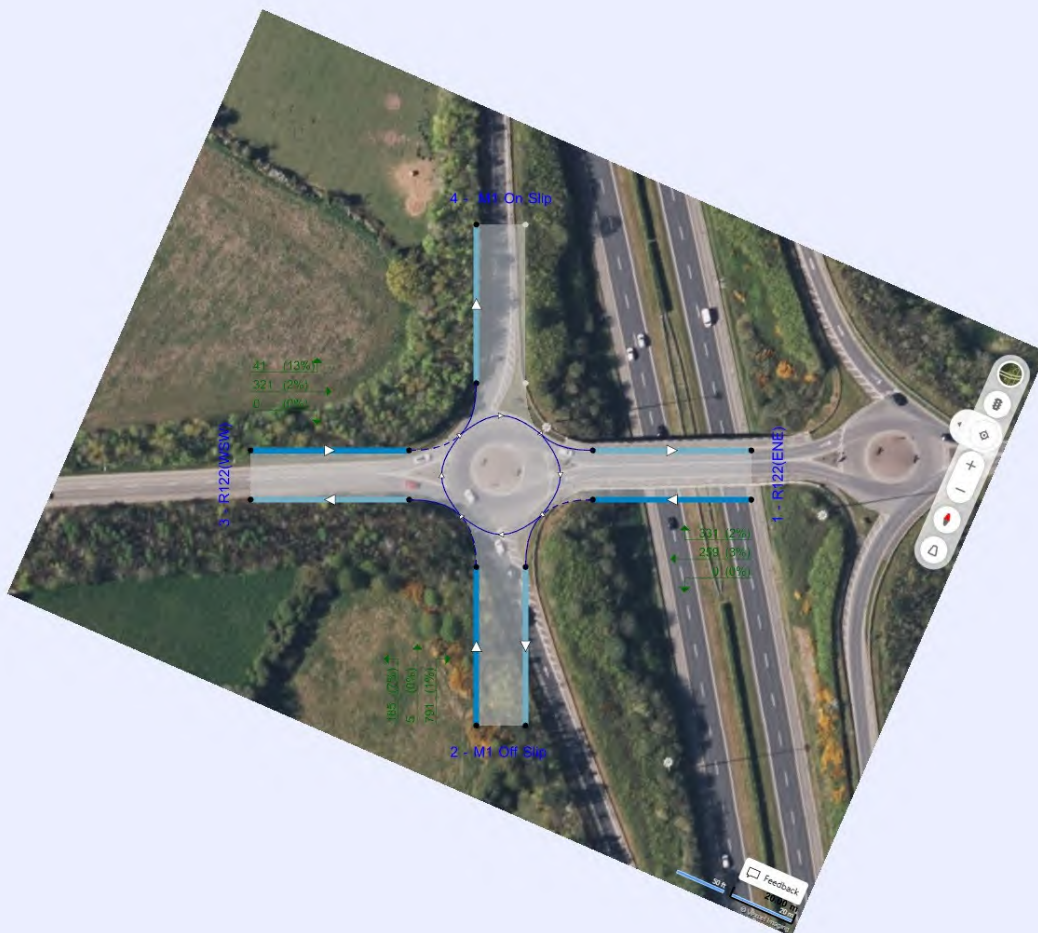
File Description

Title	C1266 2025 Glenveagh Flemington Lane Balbriggan LRD
Location	R122(ENE) / M1 Off Slip / R122(WSW) / M1 On Slip
Site number	15b
Date	16/07/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\Akshai
Description	

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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



Flows show original traffic demand (PCU/hr).

The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	Base 2025	AM	ONE HOUR	07:45	09:15	15	✓
D2	Base 2025	PM	ONE HOUR	16:30	18:00	15	✓
D3	DN 2027	AM	ONE HOUR	07:45	09:15	15	✓
D4	DN 2027	PM	ONE HOUR	16:30	18:00	15	✓
D5	DN 2032	AM	ONE HOUR	07:45	09:15	15	✓
D6	DN 2032	PM	ONE HOUR	16:30	18:00	15	✓
D7	DN 2042	AM	ONE HOUR	07:45	09:15	15	✓
D8	DN 2042	PM	ONE HOUR	16:30	18:00	15	✓
D9	DM 2027	AM	ONE HOUR	07:45	09:15	15	✓
D10	DM 2027	PM	ONE HOUR	16:30	18:00	15	✓
D11	DM 2032	AM	ONE HOUR	07:45	09:15	15	✓
D12	DM 2032	PM	ONE HOUR	16:30	18:00	15	✓
D13	DM 2042	AM	ONE HOUR	07:45	09:15	15	✓
D14	DM 2042	PM	ONE HOUR	16:30	18:00	15	✓
D15	DS 2027	AM	ONE HOUR	07:45	09:15	15	✓
D16	DS 2027	PM	ONE HOUR	16:30	18:00	15	✓
D17	DS 2032	AM	ONE HOUR	07:45	09:15	15	✓
D18	DS 2032	PM	ONE HOUR	16:30	18:00	15	✓
D19	DS 2042	AM	ONE HOUR	07:45	09:15	15	✓
D20	DS 2042	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

Base 2025, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.36	5.20	0.6	A	351	526
2 - M1 Off Slip	0.35	4.78	0.6	A	364	546
3 - R122(WSW)	0.49	8.56	1.0	A	370	554
4 - M1 On Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	288	72	0.75	1185	0.243	287	538	0.0	0.4	4.424	A
2 - M1 Off Slip	299	75	287	1345	0.222	297	0	0.0	0.3	3.758	A
3 - R122(WSW)	303	76	393	1008	0.301	301	192	0.0	0.5	5.571	A
4 - M1 On Slip			538				156				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	344	86	0.90	1185	0.290	343	644	0.4	0.4	4.721	A
2 - M1 Off Slip	357	89	344	1310	0.272	356	0	0.3	0.4	4.135	A
3 - R122(WSW)	362	91	470	964	0.376	361	230	0.5	0.7	6.538	A
4 - M1 On Slip			645				186				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	421	105	1	1185	0.355	421	788	0.4	0.6	5.195	A
2 - M1 Off Slip	437	109	422	1262	0.346	436	0	0.4	0.6	4.775	A
3 - R122(WSW)	443	111	576	905	0.490	442	282	0.7	1.0	8.496	A
4 - M1 On Slip			789				228				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	421	105	1	1185	0.355	421	790	0.6	0.6	5.203	A
2 - M1 Off Slip	437	109	422	1261	0.346	437	0	0.6	0.6	4.784	A
3 - R122(WSW)	443	111	577	904	0.490	443	283	1.0	1.0	8.560	A
4 - M1 On Slip			791				229				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	344	86	0.90	1185	0.290	344	647	0.6	0.5	4.731	A
2 - M1 Off Slip	357	89	345	1309	0.272	357	0	0.6	0.4	4.148	A
3 - R122(WSW)	362	91	472	963	0.376	364	231	1.0	0.7	6.597	A
4 - M1 On Slip			648				187				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	288	72	0.75	1185	0.243	288	541	0.5	0.4	4.434	A
2 - M1 Off Slip	299	75	289	1344	0.222	299	0	0.4	0.3	3.777	A
3 - R122(WSW)	303	76	395	1007	0.301	304	193	0.7	0.5	5.624	A
4 - M1 On Slip			542				157				

Base 2025, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.42	5.40	0.8	A	419	628
2 - M1 Off Slip	0.71	10.37	2.4	B	714	1072
3 - R122(WSW)	0.44	9.73	0.8	A	252	379
4 - M1 On Slip						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	344	86	0.75	1185	0.290	342	643	0.0	0.4	4.366	A
2 - M1 Off Slip	586	147	343	1311	0.447	583	0	0.0	0.8	5.020	A
3 - R122(WSW)	207	52	659	858	0.241	206	267	0.0	0.3	5.674	A
4 - M1 On Slip			644				221				

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	410	103	0.90	1185	0.346	410	770	0.4	0.5	4.752	A
2 - M1 Off Slip	700	175	411	1268	0.552	698	0	0.8	1.2	6.417	A
3 - R122(WSW)	247	62	789	785	0.315	247	320	0.3	0.5	6.887	A
4 - M1 On Slip			771				264				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	503	126	1	1185	0.424	502	941	0.5	0.7	5.389	A
2 - M1 Off Slip	857	214	503	1211	0.708	853	0	1.2	2.4	10.113	B
3 - R122(WSW)	303	76	964	686	0.441	301	391	0.5	0.8	9.611	A
4 - M1 On Slip			942				324				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	503	126	1	1185	0.424	502	946	0.7	0.8	5.401	A
2 - M1 Off Slip	857	214	504	1210	0.708	857	0	2.4	2.4	10.372	B
3 - R122(WSW)	303	76	968	684	0.443	303	392	0.8	0.8	9.730	A
4 - M1 On Slip			947				324				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	410	103	0.90	1185	0.346	411	777	0.8	0.5	4.770	A
2 - M1 Off Slip	700	175	412	1268	0.552	704	0	2.4	1.3	6.572	A
3 - R122(WSW)	247	62	795	781	0.316	249	322	0.8	0.5	6.979	A
4 - M1 On Slip			778				265				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	344	86	0.76	1185	0.290	344	649	0.5	0.4	4.387	A
2 - M1 Off Slip	586	147	345	1309	0.448	588	0	1.3	0.8	5.100	A
3 - R122(WSW)	207	52	664	855	0.242	208	269	0.5	0.3	5.735	A
4 - M1 On Slip			649				222				

DN 2027, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.37	5.35	0.6	A	365	547
2 - M1 Off Slip	0.36	4.95	0.6	A	378	567
3 - R122(WSW)	0.52	9.15	1.2	A	384	576
4 - M1 On Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	299	75	0.75	1185	0.252	298	558	0.0	0.4	4.495	A
2 - M1 Off Slip	310	78	299	1338	0.232	309	0	0.0	0.3	3.827	A
3 - R122(WSW)	315	79	408	999	0.315	313	200	0.0	0.5	5.734	A
4 - M1 On Slip			559				162				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	357	89	0.90	1185	0.302	357	669	0.4	0.5	4.822	A
2 - M1 Off Slip	371	93	358	1301	0.285	370	0	0.3	0.4	4.234	A
3 - R122(WSW)	376	94	488	954	0.394	375	240	0.5	0.7	6.810	A
4 - M1 On Slip			670				194				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	438	109	1	1185	0.369	437	818	0.5	0.6	5.337	A
2 - M1 Off Slip	454	113	438	1251	0.363	453	0	0.4	0.6	4.939	A
3 - R122(WSW)	461	115	598	892	0.516	459	293	0.7	1.1	9.066	A
4 - M1 On Slip			819				237				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	438	109	1	1185	0.369	438	821	0.6	0.6	5.345	A
2 - M1 Off Slip	454	113	439	1251	0.363	454	0	0.6	0.6	4.949	A
3 - R122(WSW)	461	115	599	892	0.517	461	294	1.1	1.2	9.150	A
4 - M1 On Slip			822				238				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	357	89	0.90	1185	0.302	358	672	0.6	0.5	4.835	A
2 - M1 Off Slip	371	93	359	1301	0.285	371	0	0.6	0.4	4.249	A
3 - R122(WSW)	376	94	490	953	0.395	378	240	1.2	0.7	6.880	A
4 - M1 On Slip			673				195				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	299	75	0.75	1185	0.252	300	562	0.5	0.4	4.513	A
2 - M1 Off Slip	310	78	300	1337	0.232	311	0	0.4	0.3	3.844	A
3 - R122(WSW)	315	79	410	998	0.316	316	201	0.7	0.5	5.791	A
4 - M1 On Slip			563				163				

DN 2027, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.44	5.55	0.8	A	434	651
2 - M1 Off Slip	0.74	11.82	2.9	B	741	1111
3 - R122(WSW)	0.47	10.60	0.9	B	262	393
4 - M1 On Slip						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	356	89	0.75	1185	0.301	355	666	0.0	0.4	4.430	A
2 - M1 Off Slip	608	152	355	1303	0.466	604	0	0.0	0.9	5.236	A
3 - R122(WSW)	215	54	683	845	0.254	213	277	0.0	0.3	5.862	A
4 - M1 On Slip			667				229				

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	425	106	0.90	1185	0.359	425	799	0.4	0.6	4.847	A
2 - M1 Off Slip	726	181	426	1259	0.576	724	0	0.9	1.4	6.845	A
3 - R122(WSW)	256	64	818	768	0.334	256	332	0.3	0.5	7.225	A
4 - M1 On Slip			799				274				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	521	130	1	1185	0.440	520	975	0.6	0.8	5.536	A
2 - M1 Off Slip	889	222	521	1199	0.741	883	0	1.4	2.8	11.419	B
3 - R122(WSW)	314	79	999	667	0.471	312	406	0.5	0.9	10.429	B
4 - M1 On Slip			976				335				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	521	130	1	1185	0.440	521	980	0.8	0.8	5.552	A
2 - M1 Off Slip	889	222	522	1199	0.741	888	0	2.8	2.9	11.820	B
3 - R122(WSW)	314	79	1004	664	0.473	314	407	0.9	0.9	10.597	B
4 - M1 On Slip			981				336				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	425	106	0.90	1185	0.359	426	807	0.8	0.9	4.866	A
2 - M1 Off Slip	726	181	427	1258	0.577	731	0	2.9	1.4	7.057	A
3 - R122(WSW)	256	64	825	765	0.335	258	334	0.9	0.5	7.345	A
4 - M1 On Slip			807				275				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	356	89	0.76	1185	0.301	357	673	0.6	0.4	4.455	A
2 - M1 Off Slip	608	152	358	1302	0.467	610	0	1.4	0.9	5.330	A
3 - R122(WSW)	215	54	688	841	0.255	215	279	0.5	0.4	5.931	A
4 - M1 On Slip			673				230				

DN 2032, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.40	5.61	0.7	A	392	588
2 - M1 Off Slip	0.40	5.32	0.7	A	406	609
3 - R122(WSW)	0.57	10.69	1.4	B	412	619
4 - M1 On Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	322	80	0.82	1185	0.271	320	599	0.0	0.4	4.628	A
2 - M1 Off Slip	333	83	321	1324	0.252	332	0	0.0	0.4	3.975	A
3 - R122(WSW)	338	85	437	983	0.344	336	215	0.0	0.6	6.139	A
4 - M1 On Slip			599				174				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	384	96	0.99	1185	0.324	384	717	0.4	0.5	5.001	A
2 - M1 Off Slip	398	100	385	1285	0.310	398	0	0.4	0.5	4.453	A
3 - R122(WSW)	404	101	524	934	0.433	403	258	0.6	0.8	7.485	A
4 - M1 On Slip			718				209				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	470	118	1	1185	0.397	470	877	0.5	0.7	5.602	A
2 - M1 Off Slip	488	122	471	1231	0.396	487	0	0.5	0.7	5.303	A
3 - R122(WSW)	495	124	641	868	0.570	492	316	0.8	1.4	10.542	B
4 - M1 On Slip			879				255				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	470	118	1	1185	0.397	470	880	0.7	0.7	5.613	A
2 - M1 Off Slip	488	122	472	1230	0.396	488	0	0.7	0.7	5.319	A
3 - R122(WSW)	495	124	643	867	0.571	495	317	1.4	1.4	10.687	B
4 - M1 On Slip			882				256				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	384	96	0.99	1185	0.324	385	722	0.7	0.5	5.019	A
2 - M1 Off Slip	398	100	386	1284	0.310	399	0	0.7	0.5	4.471	A
3 - R122(WSW)	404	101	526	933	0.433	406	259	1.4	0.9	7.596	A
4 - M1 On Slip			723				209				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	322	80	0.83	1185	0.271	322	603	0.5	0.4	4.652	A
2 - M1 Off Slip	333	83	323	1323	0.252	334	0	0.5	0.4	3.997	A
3 - R122(WSW)	338	85	440	981	0.345	339	217	0.9	0.6	6.215	A
4 - M1 On Slip			604				175				

DN 2032, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.47	5.87	0.9	A	464	697
2 - M1 Off Slip	0.81	16.13	4.1	C	792	1188
3 - R122(WSW)	0.54	12.83	1.2	B	280	420
4 - M1 On Slip						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	381	95	0.82	1185	0.322	379	712	0.0	0.5	4.563	A
2 - M1 Off Slip	650	162	380	1288	0.505	646	0	0.0	1.0	5.694	A
3 - R122(WSW)	230	57	729	818	0.281	228	296	0.0	0.4	6.277	A
4 - M1 On Slip			713				245				

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	455	114	0.99	1185	0.384	454	853	0.5	0.6	5.042	A
2 - M1 Off Slip	776	194	455	1240	0.626	774	0	1.0	1.7	7.832	A
3 - R122(WSW)	274	69	874	737	0.372	274	355	0.4	0.6	7.998	A
4 - M1 On Slip			854				293				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	557	139	1	1185	0.470	556	1039	0.6	0.9	5.855	A
2 - M1 Off Slip	951	238	557	1177	0.808	941	0	1.7	4.0	15.065	C
3 - R122(WSW)	336	84	1065	629	0.534	334	434	0.6	1.1	12.479	B
4 - M1 On Slip			1040				359				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	557	139	1	1185	0.470	557	1048	0.9	0.9	5.874	A
2 - M1 Off Slip	951	238	559	1176	0.808	950	0	4.0	4.1	16.131	C
3 - R122(WSW)	336	84	1073	625	0.538	336	436	1.1	1.2	12.831	B
4 - M1 On Slip			1049				360				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	455	114	1.00	1185	0.384	456	865	0.9	0.9	5.066	A
2 - M1 Off Slip	776	194	457	1239	0.626	786	0	4.1	1.8	8.263	A
3 - R122(WSW)	274	69	884	731	0.375	277	358	1.2	0.6	8.210	A
4 - M1 On Slip			866				295				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	381	95	0.83	1185	0.322	382	720	0.6	0.5	4.592	A
2 - M1 Off Slip	650	162	383	1286	0.505	653	0	1.8	1.1	5.831	A
3 - R122(WSW)	230	57	736	814	0.282	231	299	0.6	0.4	6.370	A
4 - M1 On Slip			721				246				

DN 2042, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.43	5.94	0.8	A	420	630
2 - M1 Off Slip	0.43	5.81	0.8	A	435	653
3 - R122(WSW)	0.63	12.74	1.8	B	442	662
4 - M1 On Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	345	86	0.90	1185	0.291	343	640	0.0	0.5	4.795	A
2 - M1 Off Slip	357	89	344	1310	0.273	355	0	0.0	0.4	4.175	A
3 - R122(WSW)	362	91	467	966	0.375	360	232	0.0	0.7	6.550	A
4 - M1 On Slip			641				187				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	412	103	1	1185	0.347	411	767	0.5	0.6	5.226	A
2 - M1 Off Slip	426	107	412	1267	0.336	426	0	0.4	0.6	4.741	A
3 - R122(WSW)	433	108	560	913	0.474	431	278	0.7	1.0	8.243	A
4 - M1 On Slip			768				224				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	504	126	1	1185	0.426	503	937	0.6	0.8	5.928	A
2 - M1 Off Slip	522	131	505	1210	0.432	521	0	0.6	0.8	5.787	A
3 - R122(WSW)	530	132	686	843	0.629	526	340	1.0	1.8	12.465	B
4 - M1 On Slip			938				274				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	504	126	1	1185	0.426	504	941	0.8	0.8	5.945	A
2 - M1 Off Slip	522	131	506	1209	0.432	522	0	0.8	0.8	5.810	A
3 - R122(WSW)	530	132	687	842	0.629	530	341	1.8	1.8	12.740	B
4 - M1 On Slip			942				274				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	412	103	1	1185	0.347	413	772	0.8	0.8	5.245	A
2 - M1 Off Slip	426	107	414	1266	0.337	427	0	0.8	0.6	4.763	A
3 - R122(WSW)	433	108	562	912	0.474	436	279	1.8	1.0	8.422	A
4 - M1 On Slip			773				225				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	345	86	0.91	1185	0.291	345	645	0.6	0.5	4.822	A
2 - M1 Off Slip	357	89	346	1309	0.273	358	0	0.6	0.4	4.202	A
3 - R122(WSW)	362	91	470	964	0.376	364	233	1.0	0.7	6.655	A
4 - M1 On Slip			646				188				

DN 2042, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.50	6.25	1.0	A	494	741
2 - M1 Off Slip	0.88	24.77	6.6	C	843	1264
3 - R122(WSW)	0.61	16.10	1.6	C	298	447
4 - M1 On Slip						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	405	101	0.90	1185	0.342	403	756	0.0	0.5	4.723	A
2 - M1 Off Slip	691	173	404	1273	0.543	686	0	0.0	1.2	6.273	A
3 - R122(WSW)	245	61	775	793	0.309	243	316	0.0	0.5	6.738	A
4 - M1 On Slip			757				260				

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	484	121	1	1185	0.408	483	906	0.5	0.7	5.270	A
2 - M1 Off Slip	825	206	484	1222	0.675	822	0	1.2	2.1	9.174	A
3 - R122(WSW)	292	73	928	706	0.413	291	378	0.5	0.7	8.926	A
4 - M1 On Slip			907				312				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	593	148	1	1185	0.500	591	1099	0.7	1.0	6.226	A
2 - M1 Off Slip	1011	253	593	1155	0.876	995	0	2.1	6.1	21.343	C
3 - R122(WSW)	358	89	1127	594	0.602	355	461	0.7	1.5	15.299	C
4 - M1 On Slip			1100				382				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	593	148	1	1185	0.500	593	1112	1.0	1.0	6.251	A
2 - M1 Off Slip	1011	253	594	1154	0.876	1009	0	6.1	6.6	24.769	C
3 - R122(WSW)	358	89	1139	588	0.609	357	464	1.5	1.6	16.102	C
4 - M1 On Slip			1113				383				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	484	121	1	1185	0.408	485	926	1.0	0.7	5.301	A
2 - M1 Off Slip	825	206	486	1221	0.676	843	0	6.6	2.2	10.223	B
3 - R122(WSW)	292	73	946	696	0.419	295	383	1.6	0.8	9.338	A
4 - M1 On Slip			927				314				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	405	101	0.91	1185	0.342	406	766	0.7	0.5	4.758	A
2 - M1 Off Slip	691	173	407	1271	0.544	695	0	2.2	1.2	6.481	A
3 - R122(WSW)	245	61	783	788	0.310	246	319	0.8	0.5	6.870	A
4 - M1 On Slip			767				262				

DM 2027, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.41	5.70	0.8	A	408	613
2 - M1 Off Slip	0.40	5.32	0.7	A	403	605
3 - R122(WSW)	0.54	10.05	1.3	B	391	587
4 - M1 On Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	335	84	0.75	1185	0.283	333	584	0.0	0.4	4.639	A
2 - M1 Off Slip	331	83	334	1316	0.251	329	0	0.0	0.4	3.951	A
3 - R122(WSW)	321	80	443	979	0.328	319	220	0.0	0.5	5.957	A
4 - M1 On Slip			585				177				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	400	100	0.90	1185	0.338	400	700	0.4	0.6	5.037	A
2 - M1 Off Slip	395	99	401	1275	0.310	394	0	0.4	0.5	4.434	A
3 - R122(WSW)	384	96	531	930	0.412	383	264	0.5	0.8	7.199	A
4 - M1 On Slip			701				212				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	490	123	1	1185	0.414	489	857	0.6	0.8	5.683	A
2 - M1 Off Slip	484	121	490	1219	0.397	483	0	0.5	0.7	5.299	A
3 - R122(WSW)	470	117	650	863	0.544	468	323	0.8	1.3	9.931	A
4 - M1 On Slip			858				260				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	490	123	1	1185	0.414	490	859	0.8	0.8	5.696	A
2 - M1 Off Slip	484	121	491	1218	0.397	484	0	0.7	0.7	5.316	A
3 - R122(WSW)	470	117	651	862	0.545	470	323	1.3	1.3	10.048	B
4 - M1 On Slip			860				261				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	400	100	0.90	1185	0.338	401	704	0.8	0.8	5.056	A
2 - M1 Off Slip	395	99	402	1274	0.310	396	0	0.7	0.5	4.451	A
3 - R122(WSW)	384	96	533	929	0.413	386	265	1.3	0.8	7.290	A
4 - M1 On Slip			705				213				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	335	84	0.76	1185	0.283	336	589	0.6	0.4	4.664	A
2 - M1 Off Slip	331	83	336	1315	0.251	331	0	0.5	0.4	3.972	A
3 - R122(WSW)	321	80	446	978	0.328	322	221	0.8	0.5	6.029	A
4 - M1 On Slip			590				179				

DM 2027, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.48	5.96	0.9	A	472	709
2 - M1 Off Slip	0.81	16.03	4.1	C	786	1179
3 - R122(WSW)	0.56	13.63	1.3	B	290	434
4 - M1 On Slip						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	388	97	0.75	1185	0.327	386	726	0.0	0.5	4.600	A
2 - M1 Off Slip	645	161	386	1284	0.502	641	0	0.0	1.0	5.683	A
3 - R122(WSW)	238	59	737	814	0.292	236	290	0.0	0.4	6.392	A
4 - M1 On Slip			727				246				

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	463	116	0.90	1185	0.390	462	870	0.5	0.7	5.096	A
2 - M1 Off Slip	770	193	463	1236	0.623	768	0	1.0	1.7	7.808	A
3 - R122(WSW)	284	71	883	732	0.388	283	348	0.4	0.6	8.235	A
4 - M1 On Slip			871				295				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	567	142	1	1185	0.478	566	1059	0.7	0.9	5.942	A
2 - M1 Off Slip	943	236	567	1171	0.806	934	0	1.7	3.9	14.982	B
3 - R122(WSW)	347	87	1076	623	0.558	345	425	0.6	1.3	13.214	B
4 - M1 On Slip			1060				361				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	567	142	1	1185	0.478	567	1068	0.9	0.9	5.963	A
2 - M1 Off Slip	943	236	568	1170	0.806	943	0	3.9	4.1	16.026	C
3 - R122(WSW)	347	87	1084	619	0.562	347	427	1.3	1.3	13.633	B
4 - M1 On Slip			1069				362				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	463	116	0.91	1185	0.390	464	882	0.9	0.7	5.121	A
2 - M1 Off Slip	770	193	465	1235	0.624	779	0	4.1	1.7	8.231	A
3 - R122(WSW)	284	71	893	726	0.391	286	351	1.3	0.7	8.474	A
4 - M1 On Slip			883				296				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	388	97	0.76	1185	0.327	388	734	0.7	0.5	4.631	A
2 - M1 Off Slip	645	161	389	1282	0.503	648	0	1.7	1.0	5.818	A
3 - R122(WSW)	238	59	744	810	0.293	239	293	0.7	0.4	6.493	A
4 - M1 On Slip			734				248				

DM 2032, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.44	6.00	0.9	A	436	654
2 - M1 Off Slip	0.43	5.80	0.8	A	431	647
3 - R122(WSW)	0.60	11.82	1.6	B	420	630
4 - M1 On Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	357	89	0.82	1185	0.302	356	625	0.0	0.5	4.781	A
2 - M1 Off Slip	354	88	356	1302	0.272	352	0	0.0	0.4	4.146	A
3 - R122(WSW)	345	86	473	963	0.358	342	235	0.0	0.6	6.342	A
4 - M1 On Slip			626				189				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	427	107	0.99	1185	0.360	426	749	0.5	0.6	5.235	A
2 - M1 Off Slip	422	106	427	1258	0.336	422	0	0.4	0.5	4.715	A
3 - R122(WSW)	411	103	567	910	0.452	410	282	0.6	0.9	7.889	A
4 - M1 On Slip			750				227				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	523	131	1	1185	0.441	522	916	0.6	0.9	5.985	A
2 - M1 Off Slip	517	129	523	1198	0.432	516	0	0.5	0.8	5.774	A
3 - R122(WSW)	504	126	694	838	0.601	501	345	0.9	1.6	11.610	B
4 - M1 On Slip			917				278				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	523	131	1	1185	0.441	523	919	0.9	0.9	6.002	A
2 - M1 Off Slip	517	129	524	1198	0.432	517	0	0.8	0.8	5.798	A
3 - R122(WSW)	504	126	695	838	0.602	504	346	1.6	1.6	11.822	B
4 - M1 On Slip			920				279				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	427	107	1.00	1185	0.360	428	754	0.9	0.9	5.255	A
2 - M1 Off Slip	422	106	429	1257	0.336	423	0	0.8	0.6	4.740	A
3 - R122(WSW)	411	103	569	909	0.453	414	283	1.6	0.9	8.036	A
4 - M1 On Slip			755				228				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	357	89	0.83	1185	0.302	358	630	0.6	0.5	4.810	A
2 - M1 Off Slip	354	88	359	1301	0.272	354	0	0.6	0.4	4.172	A
3 - R122(WSW)	345	86	476	961	0.359	346	237	0.9	0.6	6.432	A
4 - M1 On Slip			631				191				

DM 2032, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.51	6.34	1.1	A	503	754
2 - M1 Off Slip	0.88	24.65	6.5	C	838	1256
3 - R122(WSW)	0.64	17.50	1.7	C	308	462
4 - M1 On Slip						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	412	103	0.82	1185	0.348	410	771	0.0	0.5	4.744	A
2 - M1 Off Slip	687	172	411	1268	0.542	682	0	0.0	1.2	6.226	A
3 - R122(WSW)	253	63	784	788	0.321	251	310	0.0	0.5	6.883	A
4 - M1 On Slip			772				262				

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	492	123	0.99	1185	0.416	492	924	0.5	0.7	5.312	A
2 - M1 Off Slip	821	205	493	1217	0.674	817	0	1.2	2.1	9.106	A
3 - R122(WSW)	302	75	938	701	0.431	301	371	0.5	0.8	9.248	A
4 - M1 On Slip			925				314				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	603	151	1	1185	0.509	602	1120	0.7	1.0	6.309	A
2 - M1 Off Slip	1005	251	603	1148	0.875	989	0	2.1	6.0	21.251	C
3 - R122(WSW)	370	92	1140	587	0.629	366	452	0.8	1.7	16.496	C
4 - M1 On Slip			1121				384				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	603	151	1	1185	0.509	603	1134	1.0	1.1	6.336	A
2 - M1 Off Slip	1005	251	604	1147	0.876	1003	0	6.0	6.5	24.655	C
3 - R122(WSW)	370	92	1152	580	0.637	369	456	1.7	1.7	17.501	C
4 - M1 On Slip			1135				385				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	492	123	1	1185	0.416	494	945	1.1	0.7	5.344	A
2 - M1 Off Slip	821	205	495	1216	0.675	838	0	6.5	2.2	10.140	B
3 - R122(WSW)	302	75	956	690	0.437	305	376	1.7	0.8	9.727	A
4 - M1 On Slip			946				316				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	412	103	0.83	1185	0.348	413	781	0.7	0.6	4.780	A
2 - M1 Off Slip	687	172	414	1266	0.543	691	0	2.2	1.2	6.428	A
3 - R122(WSW)	253	63	792	783	0.323	254	313	0.8	0.5	7.028	A
4 - M1 On Slip			782				264				

DM 2042, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.47	6.38	1.0	A	464	696
2 - M1 Off Slip	0.47	6.33	1.0	A	460	690
3 - R122(WSW)	0.66	14.52	2.1	B	449	674
4 - M1 On Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	381	95	0.90	1185	0.321	378	666	0.0	0.5	4.959	A
2 - M1 Off Slip	377	94	379	1288	0.293	376	0	0.0	0.5	4.323	A
3 - R122(WSW)	368	92	503	946	0.390	366	252	0.0	0.7	6.839	A
4 - M1 On Slip			667				202				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	454	114	1	1185	0.383	454	798	0.5	0.7	5.481	A
2 - M1 Off Slip	451	113	455	1241	0.363	450	0	0.5	0.6	4.993	A
3 - R122(WSW)	440	110	603	889	0.495	438	302	0.7	1.1	8.809	A
4 - M1 On Slip			799				242				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	557	139	1	1185	0.470	555	975	0.7	1.0	6.360	A
2 - M1 Off Slip	552	138	557	1177	0.469	550	0	0.6	1.0	6.292	A
3 - R122(WSW)	539	135	738	813	0.662	535	369	1.1	2.1	14.096	B
4 - M1 On Slip			976				296				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	557	139	1	1185	0.470	557	980	1.0	1.0	6.382	A
2 - M1 Off Slip	552	138	558	1176	0.469	552	0	1.0	1.0	6.327	A
3 - R122(WSW)	539	135	740	813	0.663	539	370	2.1	2.1	14.523	B
4 - M1 On Slip			981				297				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	454	114	1	1185	0.383	456	805	1.0	0.7	5.506	A
2 - M1 Off Slip	451	113	457	1240	0.363	452	0	1.0	0.6	5.027	A
3 - R122(WSW)	440	110	606	888	0.495	444	303	2.1	1.1	9.057	A
4 - M1 On Slip			806				244				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	381	95	0.91	1185	0.321	381	672	0.7	0.5	4.993	A
2 - M1 Off Slip	377	94	382	1286	0.293	378	0	0.6	0.5	4.355	A
3 - R122(WSW)	368	92	507	944	0.390	370	254	1.1	0.7	6.967	A
4 - M1 On Slip			673				204				

DM 2042, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.54	6.74	1.2	A	532	798
2 - M1 Off Slip	0.95	45.09	12.5	E	888	1332
3 - R122(WSW)	0.72	23.70	2.5	C	326	489
4 - M1 On Slip						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	437	109	0.90	1185	0.368	434	815	0.0	0.6	4.895	A
2 - M1 Off Slip	729	182	435	1253	0.581	723	0	0.0	1.4	6.861	A
3 - R122(WSW)	268	67	829	762	0.351	265	329	0.0	0.6	7.440	A
4 - M1 On Slip			816				278				

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	521	130	1	1185	0.440	520	976	0.6	0.8	5.540	A
2 - M1 Off Slip	870	217	521	1199	0.725	865	0	1.4	2.6	10.845	B
3 - R122(WSW)	319	80	992	670	0.477	318	394	0.6	0.9	10.497	B
4 - M1 On Slip			977				333				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	638	160	1	1185	0.539	637	1172	0.8	1.2	6.708	A
2 - M1 Off Slip	1065	266	638	1126	0.946	1034	0	2.6	10.4	32.446	D
3 - R122(WSW)	391	98	1194	556	0.703	386	478	0.9	2.3	21.139	C
4 - M1 On Slip			1173				407				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	638	160	1	1185	0.539	638	1194	1.2	1.2	6.745	A
2 - M1 Off Slip	1065	266	640	1125	0.947	1057	0	10.4	12.5	45.087	E
3 - R122(WSW)	391	98	1214	546	0.717	390	483	2.3	2.5	23.696	C
4 - M1 On Slip			1196				408				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	521	130	1	1185	0.440	523	1018	1.2	0.9	5.581	A
2 - M1 Off Slip	870	217	524	1198	0.726	909	0	12.5	2.8	14.275	B
3 - R122(WSW)	319	80	1029	650	0.492	325	404	2.5	1.0	11.640	B
4 - M1 On Slip			1019				335				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	437	109	0.91	1185	0.368	437	828	0.8	0.6	4.938	A
2 - M1 Off Slip	729	182	438	1251	0.582	734	0	2.8	1.4	7.180	A
3 - R122(WSW)	268	67	840	756	0.354	269	333	1.0	0.6	7.654	A
4 - M1 On Slip			829				280				

DS 2027, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.42	5.77	0.8	A	419	629
2 - M1 Off Slip	0.41	5.43	0.7	A	409	613
3 - R122(WSW)	0.55	10.29	1.3	B	393	590
4 - M1 On Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	344	86	0.75	1185	0.290	342	591	0.0	0.4	4.663	A
2 - M1 Off Slip	336	84	343	1311	0.256	334	0	0.0	0.4	3.992	A
3 - R122(WSW)	323	81	452	974	0.331	321	225	0.0	0.5	6.016	A
4 - M1 On Slip			591				181				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	411	103	0.90	1185	0.346	410	708	0.4	0.6	5.079	A
2 - M1 Off Slip	401	100	411	1268	0.316	400	0	0.4	0.5	4.494	A
3 - R122(WSW)	385	96	542	924	0.417	384	270	0.5	0.8	7.298	A
4 - M1 On Slip			709				217				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	503	126	1	1185	0.424	502	866	0.6	0.8	5.761	A
2 - M1 Off Slip	491	123	503	1211	0.405	490	0	0.5	0.7	5.409	A
3 - R122(WSW)	472	118	663	856	0.552	470	330	0.8	1.3	10.167	B
4 - M1 On Slip			867				266				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	503	126	1	1185	0.424	503	869	0.8	0.8	5.774	A
2 - M1 Off Slip	491	123	504	1210	0.406	491	0	0.7	0.7	5.426	A
3 - R122(WSW)	472	118	664	855	0.552	472	331	1.3	1.3	10.294	B
4 - M1 On Slip			870				266				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	411	103	0.90	1185	0.346	412	712	0.8	0.8	5.099	A
2 - M1 Off Slip	401	100	412	1267	0.316	402	0	0.7	0.5	4.514	A
3 - R122(WSW)	385	96	543	923	0.418	387	271	1.3	0.8	7.400	A
4 - M1 On Slip			713				218				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	344	86	0.76	1185	0.290	344	595	0.6	0.5	4.689	A
2 - M1 Off Slip	336	84	345	1309	0.256	336	0	0.5	0.4	4.015	A
3 - R122(WSW)	323	81	455	973	0.332	324	226	0.8	0.5	6.087	A
4 - M1 On Slip			596				182				

DS 2027, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.49	6.08	1.0	A	482	723
2 - M1 Off Slip	0.82	17.54	4.5	C	797	1196
3 - R122(WSW)	0.59	14.66	1.4	B	296	445
4 - M1 On Slip						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	395	99	0.75	1185	0.334	393	740	0.0	0.5	4.644	A
2 - M1 Off Slip	654	164	394	1279	0.512	650	0	0.0	1.1	5.805	A
3 - R122(WSW)	243	61	750	807	0.302	241	294	0.0	0.4	6.537	A
4 - M1 On Slip			741				250				

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	472	118	0.90	1185	0.398	471	887	0.5	0.7	5.162	A
2 - M1 Off Slip	781	195	472	1230	0.635	778	0	1.1	1.7	8.089	A
3 - R122(WSW)	290	73	899	723	0.402	289	352	0.4	0.7	8.529	A
4 - M1 On Slip			888				300				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	578	145	1	1185	0.488	577	1079	0.7	1.0	6.054	A
2 - M1 Off Slip	957	239	578	1164	0.822	946	0	1.7	4.3	16.181	C
3 - R122(WSW)	356	89	1095	613	0.581	353	430	0.7	1.4	14.123	B
4 - M1 On Slip			1080				367				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	578	145	1	1185	0.488	578	1089	1.0	1.0	6.075	A
2 - M1 Off Slip	957	239	579	1163	0.822	956	0	4.3	4.5	17.544	C
3 - R122(WSW)	356	89	1103	608	0.585	356	432	1.4	1.4	14.663	B
4 - M1 On Slip			1090				368				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	472	118	0.91	1185	0.398	473	901	1.0	0.7	5.189	A
2 - M1 Off Slip	781	195	474	1229	0.636	792	0	4.5	1.8	8.601	A
3 - R122(WSW)	290	73	911	716	0.406	293	355	1.4	0.7	8.815	A
4 - M1 On Slip			902				302				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	395	99	0.76	1185	0.334	396	749	0.7	0.5	4.677	A
2 - M1 Off Slip	654	164	397	1277	0.512	657	0	1.8	1.1	5.955	A
3 - R122(WSW)	243	61	758	802	0.303	244	296	0.7	0.5	6.652	A
4 - M1 On Slip			749				252				

DS 2032, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.45	6.10	0.9	A	447	670
2 - M1 Off Slip	0.44	5.88	0.9	A	437	656
3 - R122(WSW)	0.61	12.17	1.7	B	422	633
4 - M1 On Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	366	92	0.82	1185	0.309	364	631	0.0	0.5	4.812	A
2 - M1 Off Slip	359	90	365	1297	0.277	357	0	0.0	0.4	4.154	A
3 - R122(WSW)	346	87	482	958	0.361	344	240	0.0	0.6	6.406	A
4 - M1 On Slip			632				193				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	437	109	0.99	1185	0.369	437	757	0.5	0.6	5.287	A
2 - M1 Off Slip	428	107	438	1251	0.342	428	0	0.4	0.6	4.743	A
3 - R122(WSW)	413	103	577	904	0.457	412	288	0.6	0.9	8.011	A
4 - M1 On Slip			758				232				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	536	134	1	1185	0.452	535	925	0.6	0.9	6.079	A
2 - M1 Off Slip	524	131	536	1190	0.441	523	0	0.6	0.8	5.854	A
3 - R122(WSW)	506	127	706	831	0.609	503	353	0.9	1.7	11.932	B
4 - M1 On Slip			926				284				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	536	134	1	1185	0.452	536	928	0.9	0.9	6.098	A
2 - M1 Off Slip	524	131	537	1190	0.441	524	0	0.8	0.9	5.878	A
3 - R122(WSW)	506	127	708	830	0.610	506	353	1.7	1.7	12.167	B
4 - M1 On Slip			930				284				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	437	109	1.00	1185	0.369	438	762	0.9	0.9	5.311	A
2 - M1 Off Slip	428	107	439	1250	0.342	429	0	0.9	0.6	4.770	A
3 - R122(WSW)	413	103	580	903	0.458	416	289	1.7	0.9	8.169	A
4 - M1 On Slip			763				233				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	366	92	0.83	1185	0.309	367	637	0.6	0.5	4.844	A
2 - M1 Off Slip	359	90	368	1295	0.277	359	0	0.6	0.4	4.180	A
3 - R122(WSW)	346	87	485	956	0.362	347	242	0.9	0.6	6.502	A
4 - M1 On Slip			637				195				

DS 2032, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.52	6.46	1.1	A	512	768
2 - M1 Off Slip	0.89	28.09	7.5	D	849	1273
3 - R122(WSW)	0.66	19.19	2.0	C	315	472
4 - M1 On Slip						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	420	105	0.82	1185	0.354	418	786	0.0	0.6	4.793	A
2 - M1 Off Slip	696	174	419	1263	0.551	691	0	0.0	1.2	6.370	A
3 - R122(WSW)	258	65	797	780	0.331	256	313	0.0	0.5	7.051	A
4 - M1 On Slip			787				266				

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	502	125	0.98	1185	0.423	501	941	0.6	0.7	5.384	A
2 - M1 Off Slip	831	208	502	1211	0.686	828	0	1.2	2.2	9.483	A
3 - R122(WSW)	308	77	954	692	0.446	307	375	0.5	0.8	9.616	A
4 - M1 On Slip			942				319				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	614	154	1	1185	0.519	613	1139	0.7	1.1	6.431	A
2 - M1 Off Slip	1018	255	614	1141	0.892	1000	0	2.2	6.8	23.424	C
3 - R122(WSW)	378	94	1157	577	0.654	374	457	0.8	1.8	17.850	C
4 - M1 On Slip			1140				391				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	614	154	1	1185	0.519	614	1155	1.1	1.1	6.462	A
2 - M1 Off Slip	1018	255	616	1140	0.893	1016	0	6.8	7.5	28.092	D
3 - R122(WSW)	378	94	1171	570	0.663	377	460	1.8	2.0	19.189	C
4 - M1 On Slip			1156				392				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	502	125	1	1185	0.423	503	966	1.1	0.9	5.416	A
2 - M1 Off Slip	831	208	504	1210	0.687	852	0	7.5	2.3	10.817	B
3 - R122(WSW)	308	77	975	680	0.454	313	381	2.0	0.9	10.218	B
4 - M1 On Slip			967				321				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	420	105	0.83	1185	0.354	421	796	0.8	0.6	4.831	A
2 - M1 Off Slip	696	174	422	1261	0.552	700	0	2.3	1.3	6.599	A
3 - R122(WSW)	258	65	806	775	0.333	260	316	0.9	0.5	7.213	A
4 - M1 On Slip			797				269				

DS 2042, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.48	6.49	1.0	A	475	712
2 - M1 Off Slip	0.48	6.48	1.0	A	466	699
3 - R122(WSW)	0.67	15.04	2.2	C	451	676
4 - M1 On Slip						

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	389	97	0.90	1185	0.329	387	672	0.0	0.5	4.995	A
2 - M1 Off Slip	382	96	388	1282	0.298	380	0	0.0	0.5	4.372	A
3 - R122(WSW)	370	92	512	941	0.393	367	257	0.0	0.7	6.916	A
4 - M1 On Slip			673				206				

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	465	116	1	1185	0.392	464	806	0.5	0.7	5.540	A
2 - M1 Off Slip	457	114	465	1234	0.370	456	0	0.5	0.6	5.072	A
3 - R122(WSW)	442	110	613	883	0.500	440	308	0.7	1.1	8.959	A
4 - M1 On Slip			807				247				

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	570	142	1	1185	0.481	568	984	0.7	1.0	6.466	A
2 - M1 Off Slip	559	140	570	1169	0.478	558	0	0.6	1.0	6.448	A
3 - R122(WSW)	541	135	751	806	0.671	537	377	1.1	2.2	14.558	B
4 - M1 On Slip			985				302				

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	570	142	1	1185	0.481	570	989	1.0	1.0	6.492	A
2 - M1 Off Slip	559	140	571	1168	0.479	559	0	1.0	1.0	6.484	A
3 - R122(WSW)	541	135	752	805	0.672	541	378	2.2	2.2	15.037	C
4 - M1 On Slip			990				303				

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	465	116	1	1185	0.392	466	813	1.0	0.7	5.569	A
2 - M1 Off Slip	457	114	467	1233	0.370	458	0	1.0	0.7	5.106	A
3 - R122(WSW)	442	110	616	882	0.501	446	309	2.2	1.1	9.229	A
4 - M1 On Slip			814				248				

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	389	97	0.91	1185	0.329	390	679	0.7	0.5	5.030	A
2 - M1 Off Slip	382	96	391	1281	0.299	383	0	0.7	0.5	4.405	A
3 - R122(WSW)	370	92	515	939	0.394	372	259	1.1	0.7	7.046	A
4 - M1 On Slip			679				208				

DS 2042, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

No errors or warnings

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - R122(ENE)	0.55	6.89	1.2	A	542	812
2 - M1 Off Slip	0.96	53.75	15.3	F	899	1349
3 - R122(WSW)	0.74	26.49	2.8	D	333	499
4 - M1 On Slip						

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	444	111	0.90	1185	0.375	442	830	0.0	0.6	4.945	A
2 - M1 Off Slip	738	184	443	1248	0.591	732	0	0.0	1.4	7.040	A
3 - R122(WSW)	273	68	842	755	0.362	271	333	0.0	0.6	7.647	A
4 - M1 On Slip			831				282				

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	531	133	1	1185	0.448	530	993	0.6	0.8	5.620	A
2 - M1 Off Slip	881	220	531	1193	0.738	876	0	1.4	2.7	11.376	B
3 - R122(WSW)	326	82	1008	661	0.493	325	399	0.6	1.0	10.966	B
4 - M1 On Slip			994				338				

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	650	162	1	1185	0.548	648	1188	0.8	1.2	6.849	A
2 - M1 Off Slip	1079	270	650	1119	0.964	1041	0	2.7	12.1	36.412	E
3 - R122(WSW)	399	100	1209	548	0.729	393	482	1.0	2.5	23.080	C
4 - M1 On Slip			1189				413				

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	650	162	1	1185	0.548	650	1212	1.2	1.2	6.889	A
2 - M1 Off Slip	1079	270	651	1118	0.965	1066	0	12.1	15.3	53.747	F
3 - R122(WSW)	399	100	1230	537	0.744	398	487	2.5	2.8	26.486	D
4 - M1 On Slip			1213				415				

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	531	133	1	1185	0.448	532	1045	1.2	0.9	5.660	A
2 - M1 Off Slip	881	220	533	1192	0.739	930	0	15.3	3.0	16.423	C
3 - R122(WSW)	326	82	1053	636	0.513	333	410	2.8	1.1	12.512	B
4 - M1 On Slip			1046				341				

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - R122(ENE)	444	111	0.91	1185	0.375	445	843	0.8	0.6	4.990	A
2 - M1 Off Slip	738	184	446	1246	0.592	744	0	3.0	1.5	7.402	A
3 - R122(WSW)	273	68	854	748	0.365	275	336	1.1	0.6	7.879	A
4 - M1 On Slip			844				284				

Site Access 1 – C-Ring Road / Boulevard Road Modelling Report

RECEIVED: 18/12/2025

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site_Access_01 Jn A_3 arms v0.2.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

RECEIVED: 18/12/2025

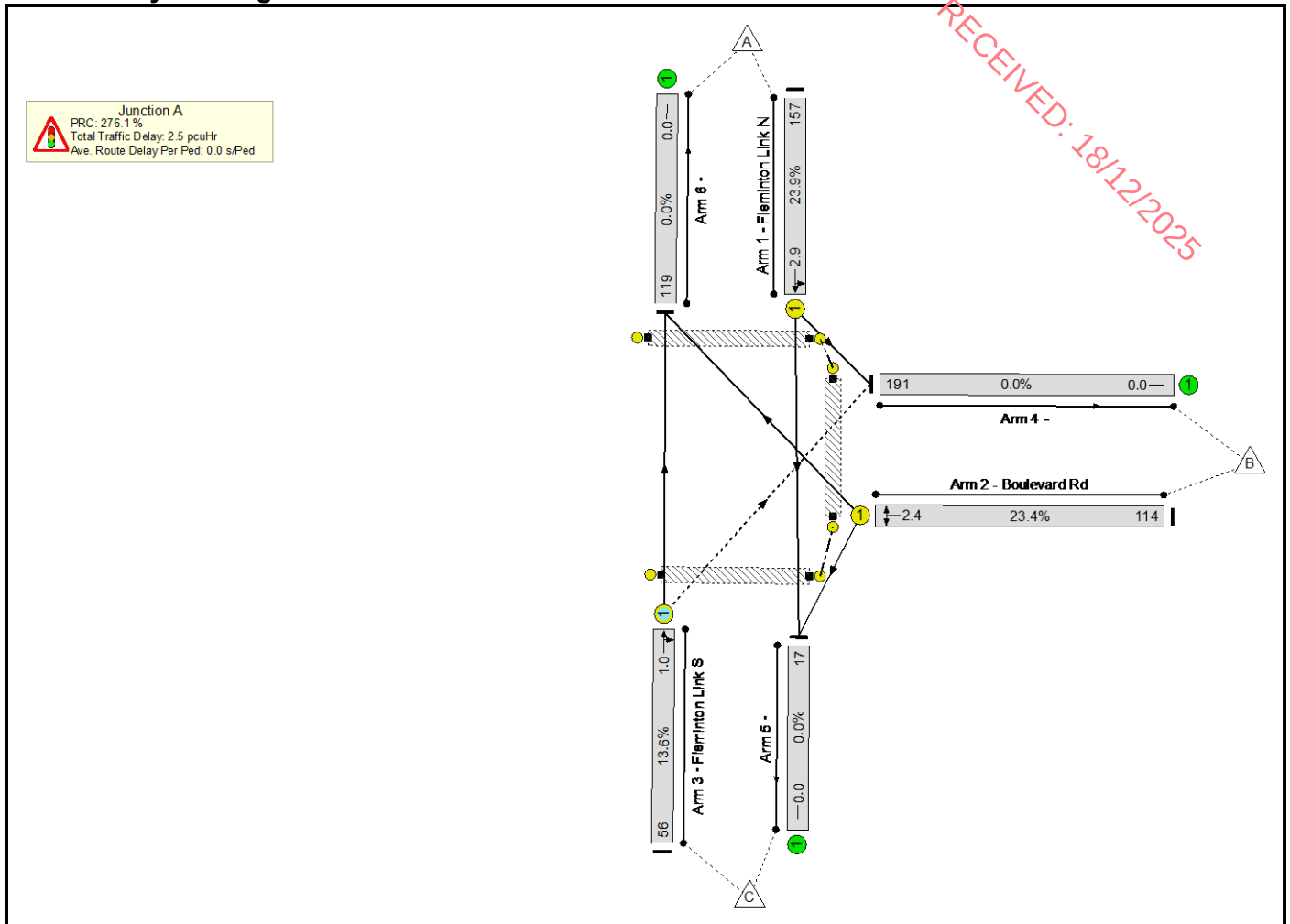
Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	DM 2027	YoO DM (2027) AM	Network Control Plan 1	08:00 - 09:00	90	276.1	2.46
2	DM 2027	YoO DM (2027) PM	Network Control Plan 1	16:45 - 17:45	90	215.2	2.78
3	DM 2032	YoO+5 DM (2032) AM	Network Control Plan 1	08:00 - 09:00	90	273.8	2.49
4	DM 2032	YoO+5 DM (2032) PM	Network Control Plan 1	16:45 - 17:45	90	213.0	2.82
5	DM 2042	YoO+15 DM (2042) AM	Network Control Plan 1	08:00 - 09:00	90	276.1	2.46
6	DM 2042	YoO+15 DM (2042) PM	Network Control Plan 1	16:45 - 17:45	90	215.2	2.78
7	DS 2027	YoO DS (2027) AM	Network Control Plan 1	08:00 - 09:00	90	151.1	4.10
8	DS 2027	YoO DS (2027) PM	Network Control Plan 1	16:45 - 17:45	90	132.5	4.92
9	DS 2032	YoO+5 DS (2032) AM	Network Control Plan 1	08:00 - 09:00	90	151.1	4.12
10	DS 2032	YoO+5 DS (2032) PM	Network Control Plan 1	16:45 - 17:45	90	131.4	4.94
11	DS 2042	YoO+15 DS (2042) AM	Network Control Plan 1	08:00 - 09:00	90	151.1	4.10
12	DS 2042	YoO+15 DS (2042) PM	Network Control Plan 1	16:45 - 17:45	90	132.5	4.92

Basic Results Summary

Scenario 1: 'DM 2027' (FG1: 'YoO DM (2027) AM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

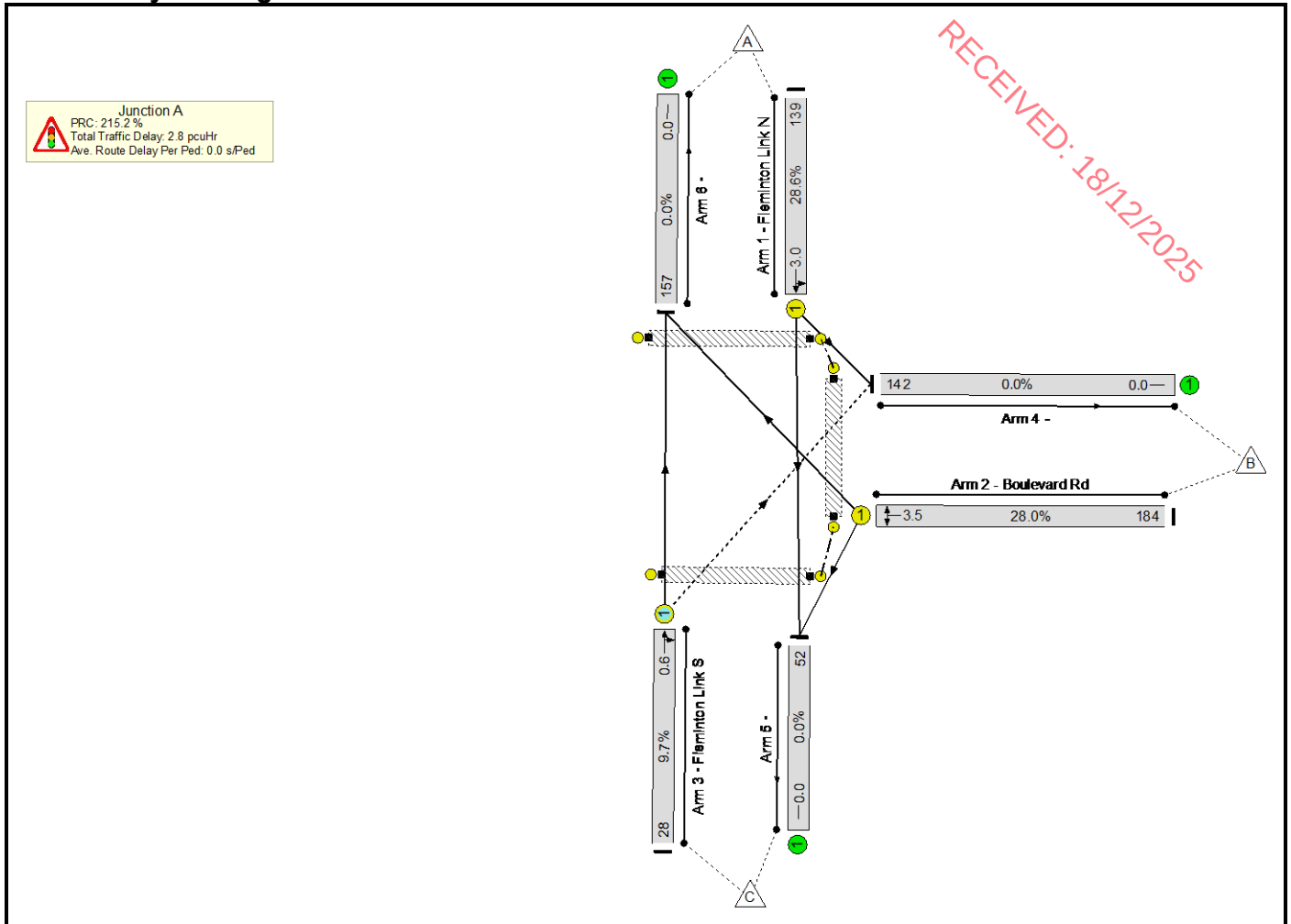


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	23.9%	13	26	0	2.5	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	23.9%	13	26	0	2.5	-	-
1/1	Fleminton Link N Left Ahead	U	A		1	30	-	-	157	1905	656	23.9%	-	-	-	1.1	24.7	2.9
2/1	Boulevard Rd Left Right	U	B	F	1	22	0	-	114	1905	487	23.4%	-	-	-	1.0	31.4	2.4
3/1	Fleminton Link S Right Ahead	O	C	H	1	30	0	-	56	1915	413	13.6%	13	26	0	0.4	25.2	1.0
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1					PRC for Signalled Lanes (%):			276.1		Total Delay for Signalled Lanes (pcuHr):			2.46		Cycle Time (s):		90	
					PRC Over All Lanes (%):			276.1		Total Delay Over All Lanes (pcuHr):			2.46					

Network Layout Diagram

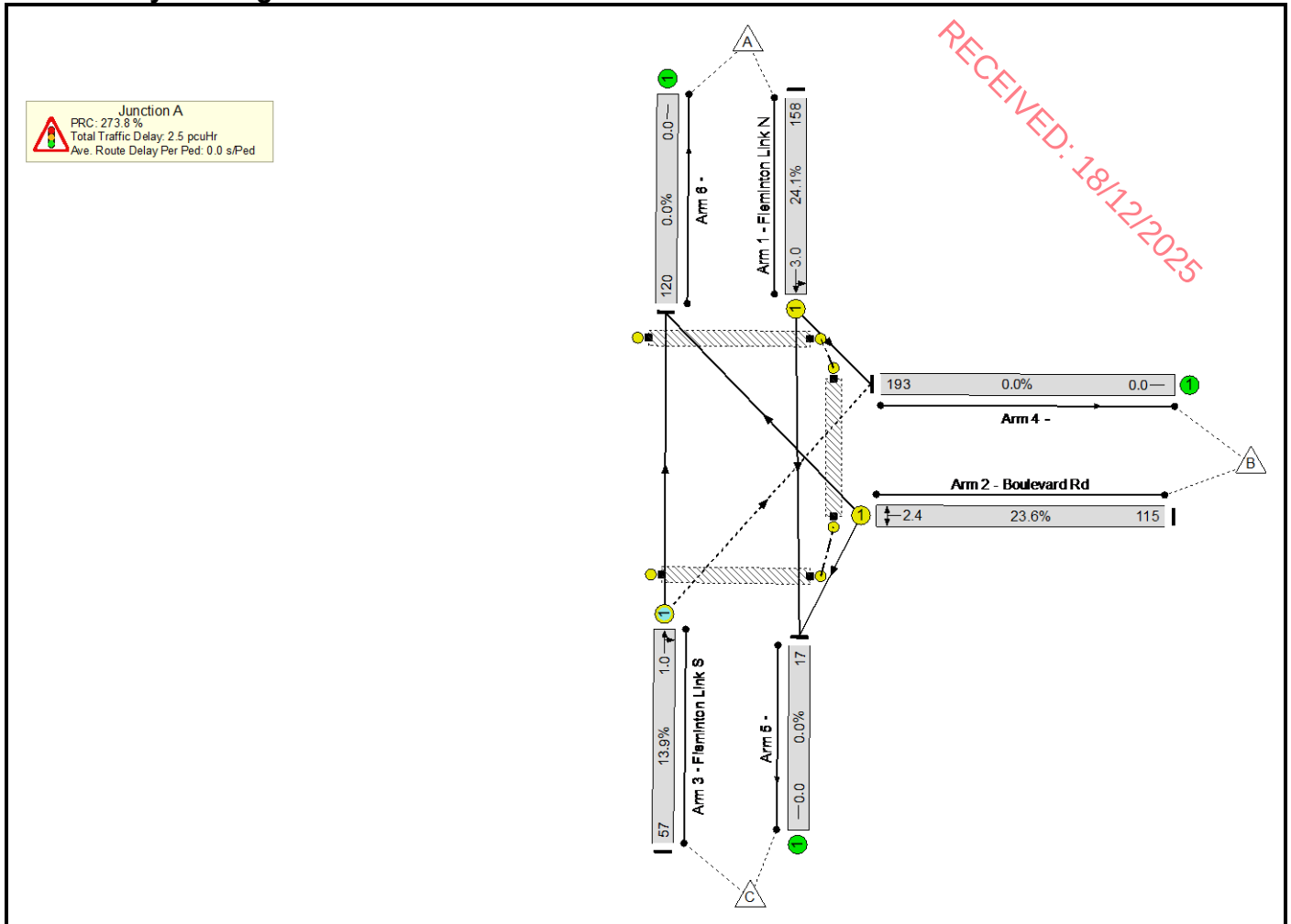


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	28.6%	5	15	0	2.8	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	28.6%	5	15	0	2.8	-	-
1/1	Fleminton Link N Left Ahead	U	A		1	22	-	-	139	1905	487	28.6%	-	-	-	1.2	32.1	3.0
2/1	Boulevard Rd Left Right	U	B	F	1	30	0	-	184	1905	656	28.0%	-	-	-	1.3	25.2	3.5
3/1	Fleminton Link S Right Ahead	O	C	H	1	22	0	-	28	1915	290	9.7%	5	15	0	0.3	32.4	0.6
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		215.2		215.2		Total Delay for Signalled Lanes (pcuHr):			2.78		Cycle Time (s):		90		
			PRC Over All Lanes (%):		215.2		215.2		Total Delay Over All Lanes(pcuHr):			2.78						

Network Layout Diagram

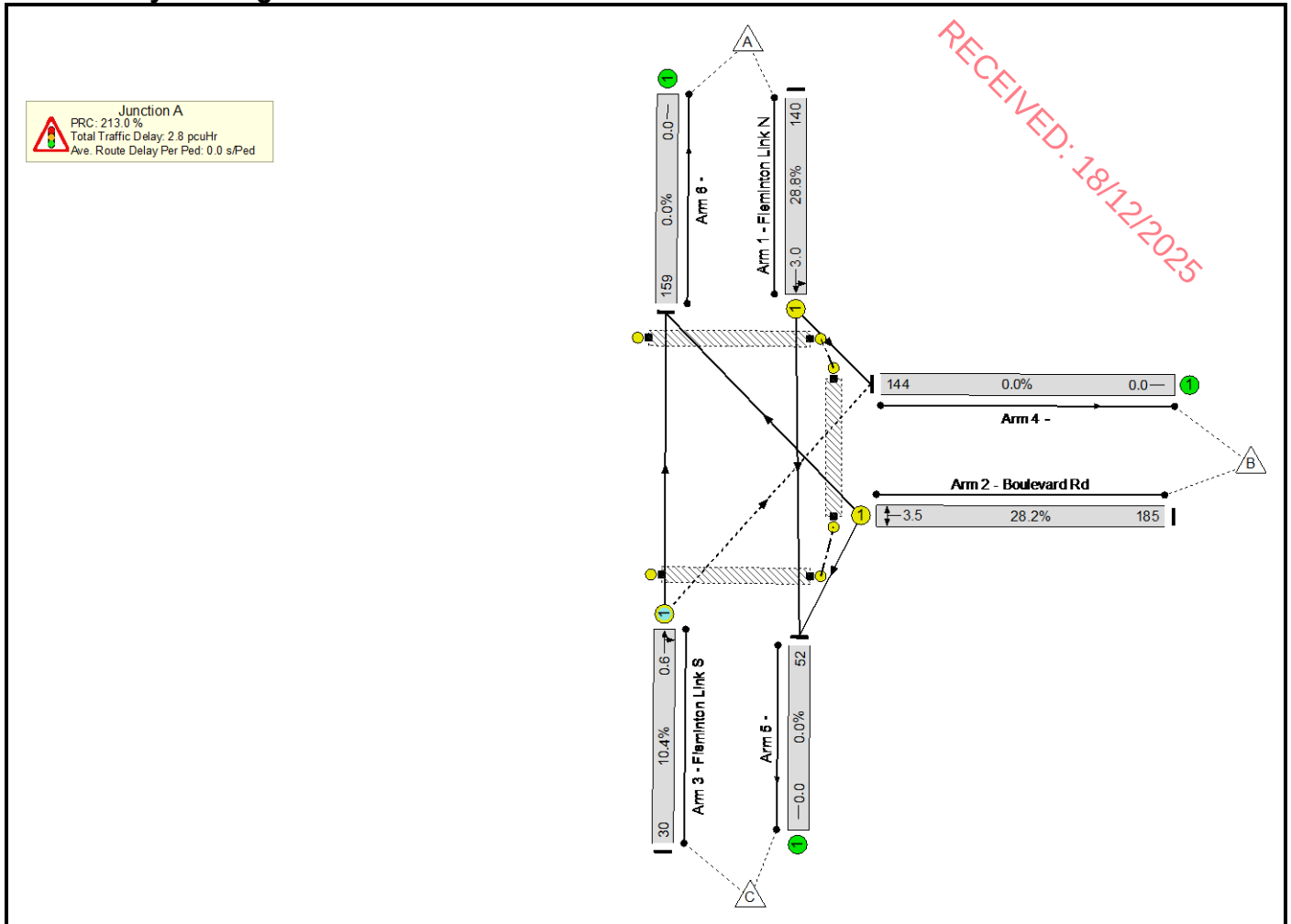


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	24.1%	13	27	0	2.5	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	24.1%	13	27	0	2.5	-	-
1/1	Fleminton Link N Left Ahead	U	A		1	30	-	-	158	1905	656	24.1%	-	-	-	1.1	24.7	3.0
2/1	Boulevard Rd Left Right	U	B	F	1	22	0	-	115	1905	487	23.6%	-	-	-	1.0	31.4	2.4
3/1	Fleminton Link S Right Ahead	O	C	H	1	30	0	-	57	1915	411	13.9%	13	27	0	0.4	25.2	1.0
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 273.8 Total Delay for Signalled Lanes (pcuHr): 2.49 Cycle Time (s): 90 PRC Over All Lanes (%): 273.8 Total Delay Over All Lanes(pcuHr): 2.49																		

Network Layout Diagram

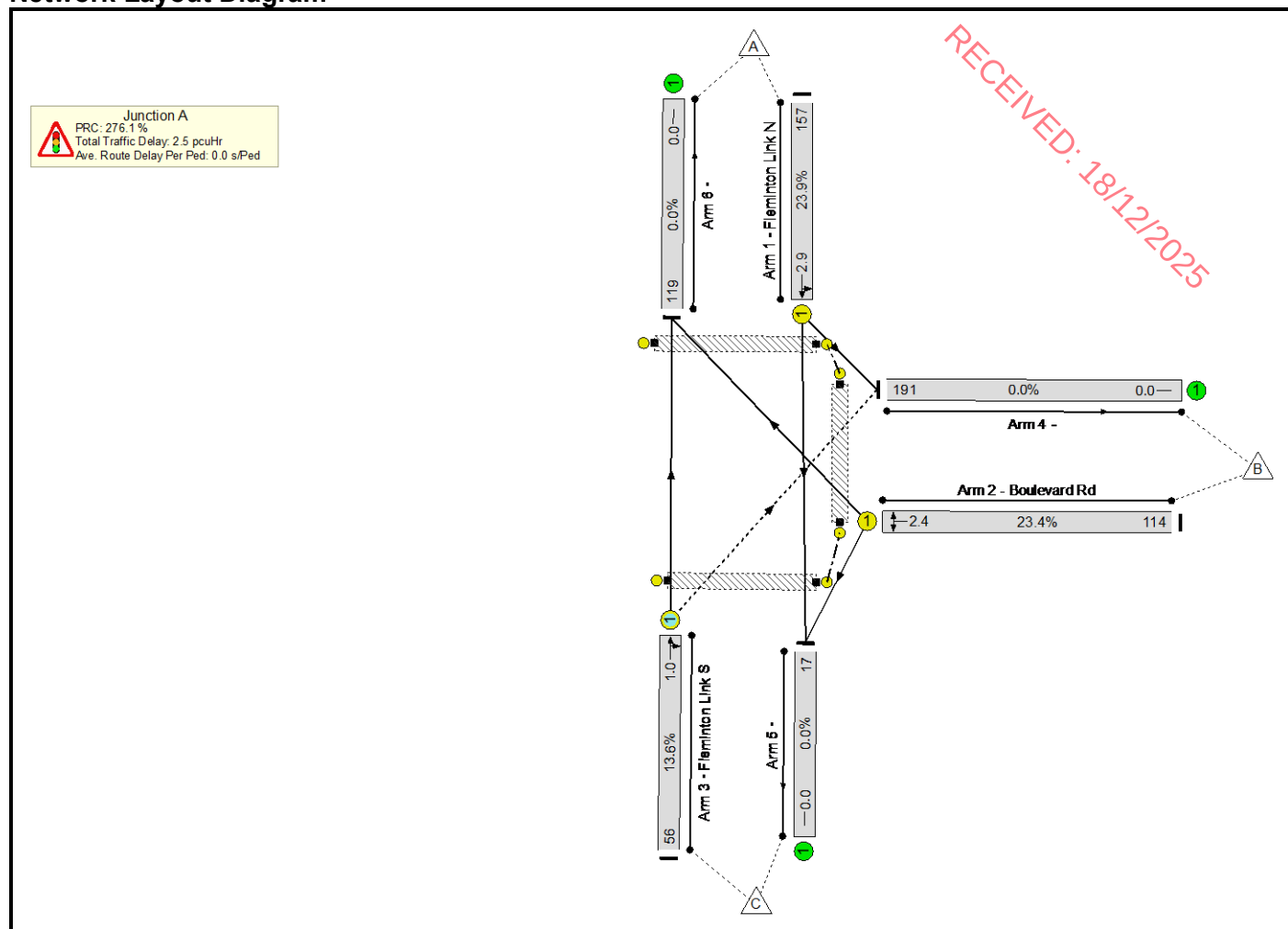


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	28.8%	5	16	0	2.8	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	28.8%	5	16	0	2.8	-	-
1/1	Fleminton Link N Left Ahead	U	A		1	22	-	-	140	1905	487	28.8%	-	-	-	1.2	32.1	3.0
2/1	Boulevard Rd Left Right	U	B	F	1	30	0	-	185	1905	656	28.2%	-	-	-	1.3	25.2	3.5
3/1	Fleminton Link S Right Ahead	O	C	H	1	22	0	-	30	1915	290	10.4%	5	16	0	0.3	32.5	0.6
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1																		

Network Layout Diagram

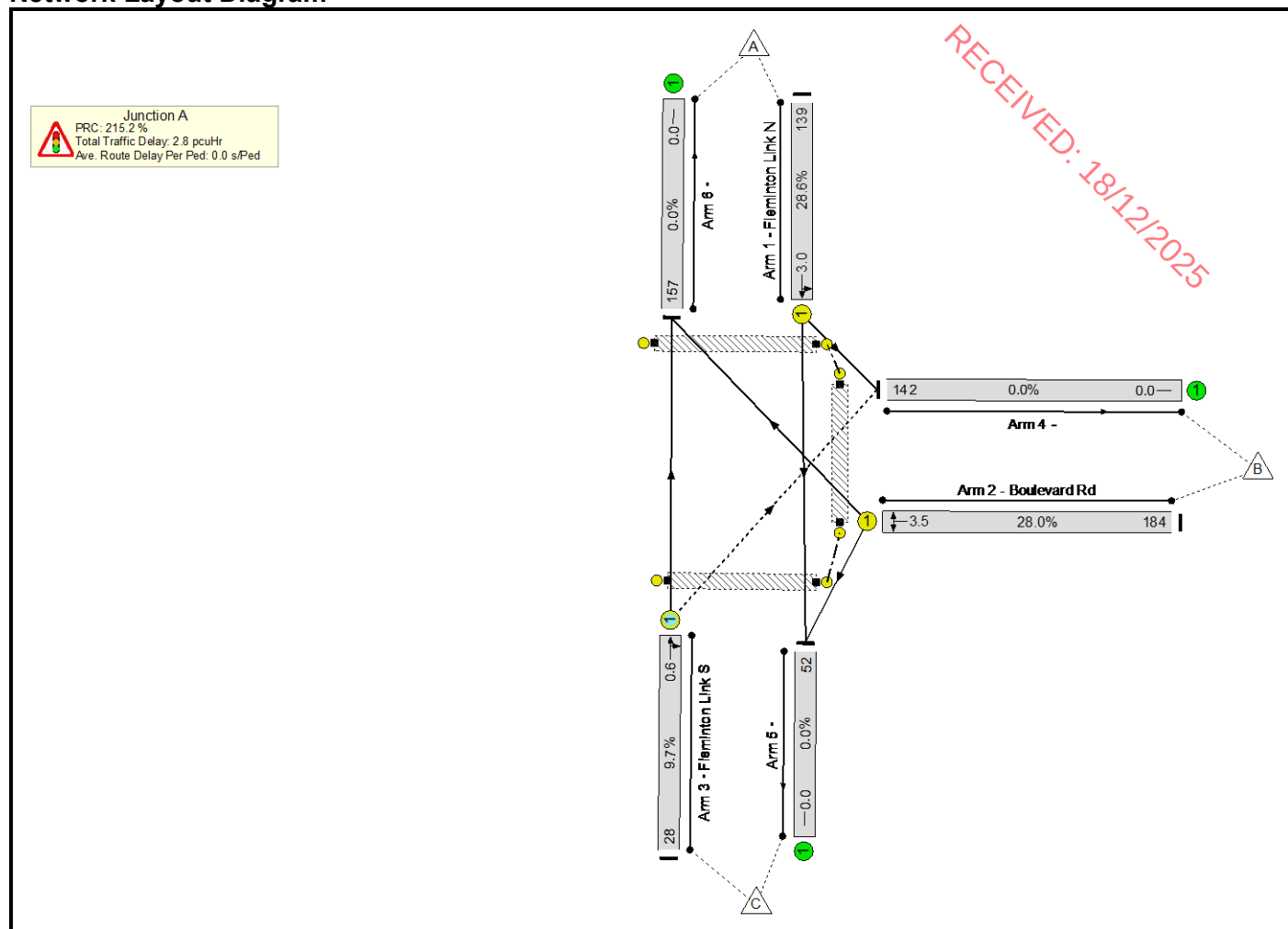


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	23.9%	13	26	0	2.5	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	23.9%	13	26	0	2.5	-	-
1/1	Fleminton Link N Left Ahead	U	A		1	30	-	-	157	1905	656	23.9%	-	-	-	1.1	24.7	2.9
2/1	Boulevard Rd Left Right	U	B	F	1	22	0	-	114	1905	487	23.4%	-	-	-	1.0	31.4	2.4
3/1	Fleminton Link S Right Ahead	O	C	H	1	30	0	-	56	1915	413	13.6%	13	26	0	0.4	25.2	1.0
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1					PRC for Signalled Lanes (%):			276.1		Total Delay for Signalled Lanes (pcuHr):			2.46		Cycle Time (s):		90	
					PRC Over All Lanes (%):			276.1		Total Delay Over All Lanes(pcuHr):			2.46					

Network Layout Diagram

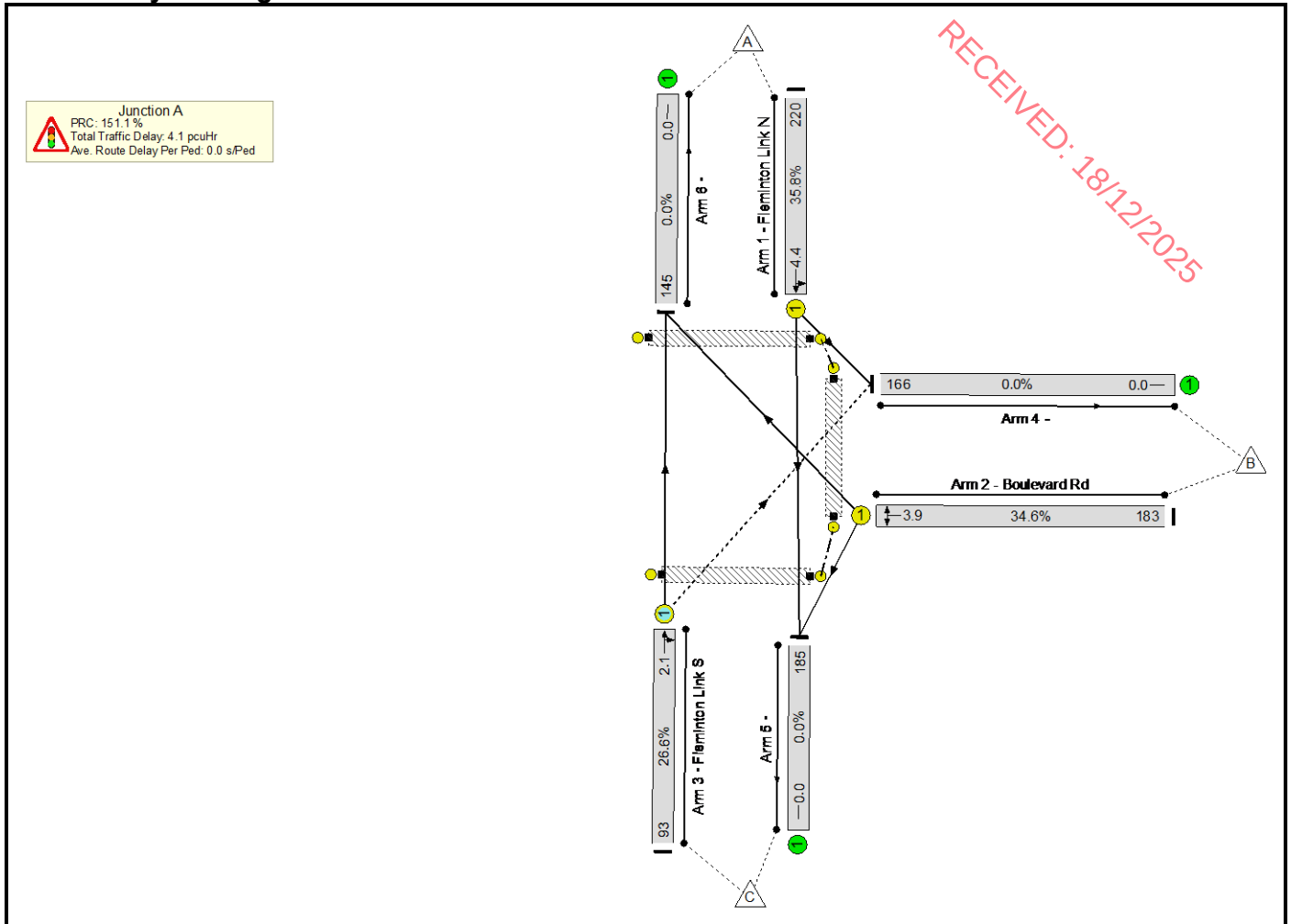


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	28.6%	5	15	0	2.8	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	28.6%	5	15	0	2.8	-	-
1/1	Fleminton Link N Left Ahead	U	A		1	22	-	-	139	1905	487	28.6%	-	-	-	1.2	32.1	3.0
2/1	Boulevard Rd Left Right	U	B	F	1	30	0	-	184	1905	656	28.0%	-	-	-	1.3	25.2	3.5
3/1	Fleminton Link S Right Ahead	O	C	H	1	22	0	-	28	1915	290	9.7%	5	15	0	0.3	32.4	0.6
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1					PRC for Signalled Lanes (%): 215.2			PRC Over All Lanes (%): 215.2			Total Delay for Signalled Lanes (pcuHr): 2.78			Total Delay Over All Lanes(pcuHr): 2.78			Cycle Time (s): 90	

Network Layout Diagram

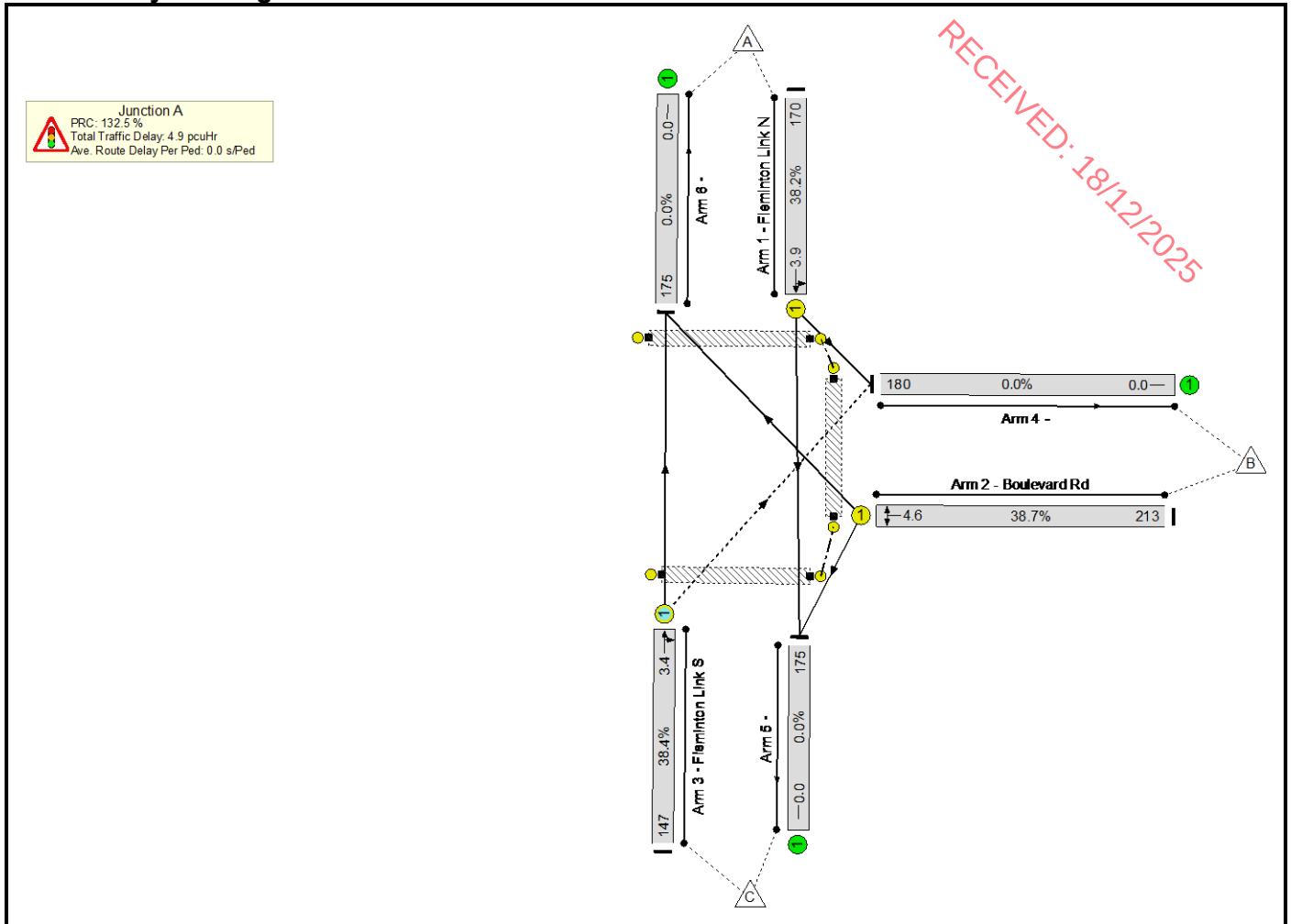


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	35.8%	27	22	0	4.1	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	35.8%	27	22	0	4.1	-	-
1/1	Fleminton Link N Left Ahead	U	A		1	28	-	-	220	1905	614	35.8%	-	-	-	1.7	27.9	4.4
2/1	Boulevard Rd Left Right	U	B	F	1	24	0	-	183	1905	529	34.6%	-	-	-	1.6	31.2	3.9
3/1	Fleminton Link S Right Ahead	O	C	H	1	28	0	-	93	1915	350	26.6%	27	22	0	0.8	31.2	2.1
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		151.1		Total Delay for Signalled Lanes (pcuHr):		4.10		Cycle Time (s):		90					
			PRC Over All Lanes (%):		151.1		Total Delay Over All Lanes (pcuHr):		4.10									

Network Layout Diagram

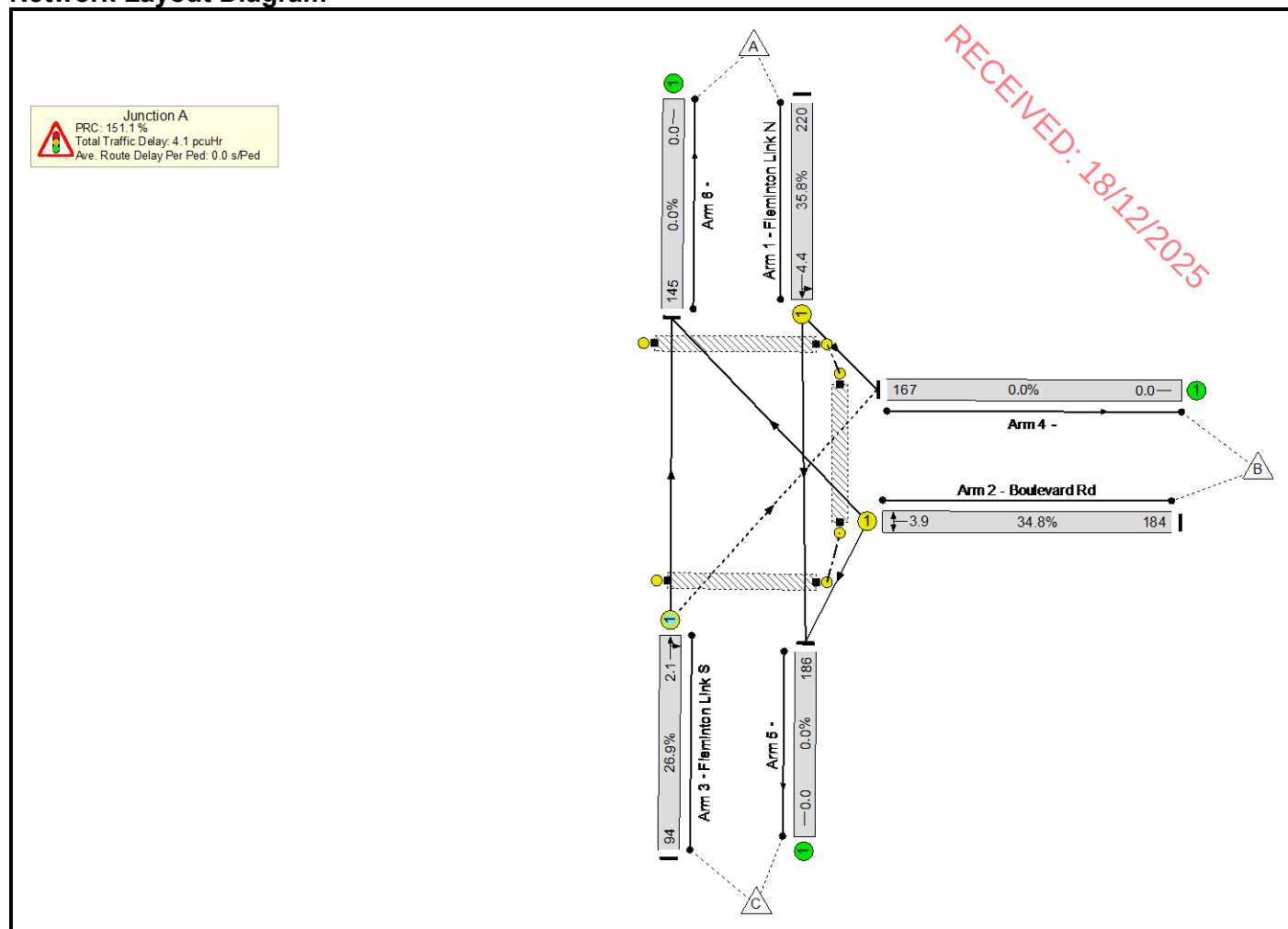


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	38.7%	50	26	0	4.9	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	38.7%	50	26	0	4.9	-	-
1/1	Fleminton Link N Left Ahead	U	A		1	20	-	-	170	1905	444	38.2%	-	-	-	1.7	35.6	3.9
2/1	Boulevard Rd Left Right	U	B	F	1	25	0	-	213	1905	550	38.7%	-	-	-	1.8	30.9	4.6
3/1	Fleminton Link S Right Ahead	O	C	H	1	27	0	-	147	1915	383	38.4%	50	26	0	1.4	34.5	3.4
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 132.5 Total Delay for Signalled Lanes (pcuHr): 4.92 Cycle Time (s): 90 PRC Over All Lanes (%): 132.5 Total Delay Over All Lanes(pcuHr): 4.92																		

Network Layout Diagram

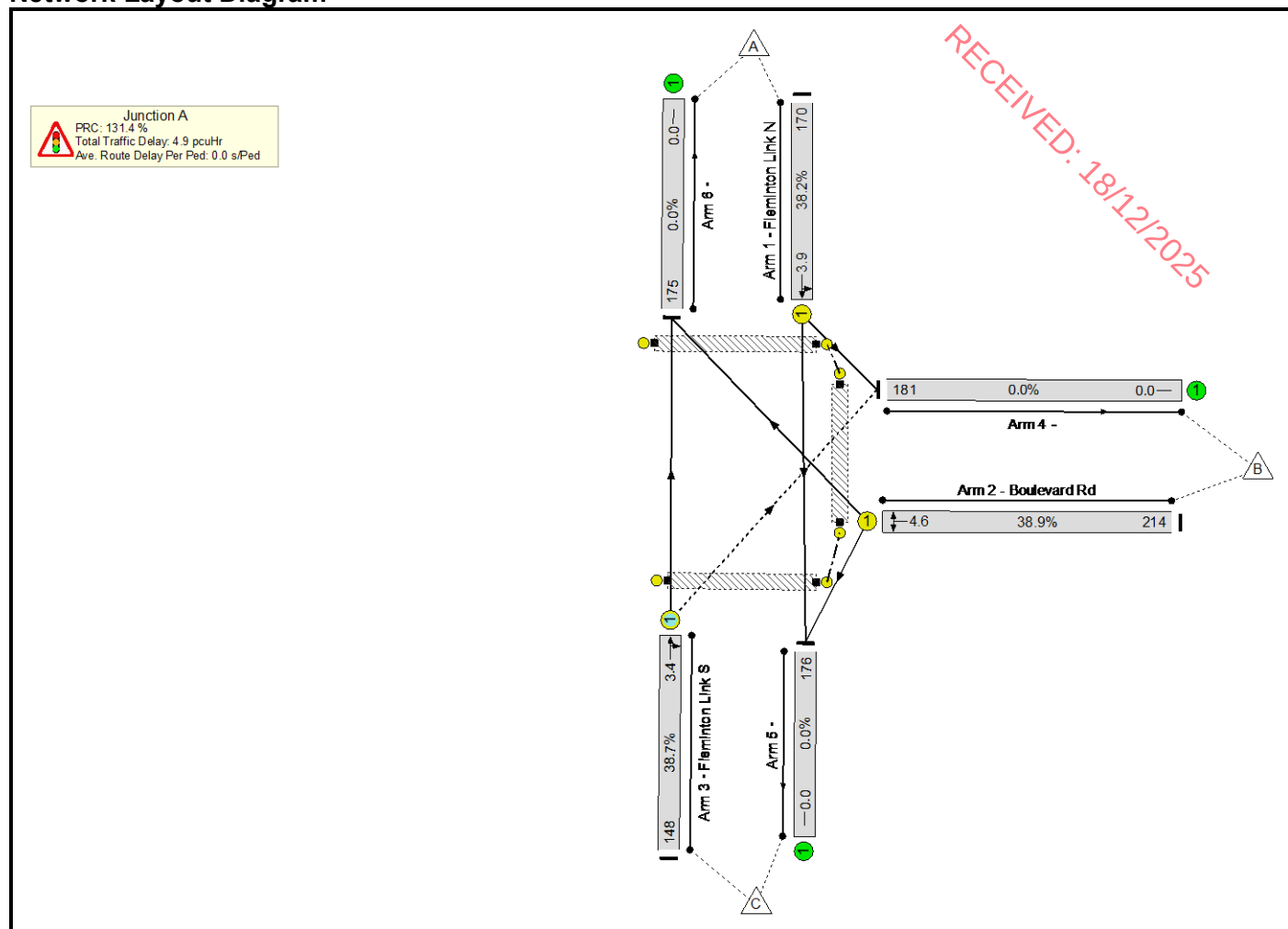


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	35.8%	27	23	0	4.1	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	35.8%	27	23	0	4.1	-	-
1/1	Fleminton Link N Left Ahead	U	A		1	28	-	-	220	1905	614	35.8%	-	-	-	1.7	27.9	4.4
2/1	Boulevard Rd Left Right	U	B	F	1	24	0	-	184	1905	529	34.8%	-	-	-	1.6	31.2	3.9
3/1	Fleminton Link S Right Ahead	O	C	H	1	28	0	-	94	1915	349	26.9%	27	23	0	0.8	31.3	2.1
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1			PRC for Signalled Lanes (%):		151.1		151.1		Total Delay for Signalled Lanes (pcuHr):		4.12		Cycle Time (s):		90			
			PRC Over All Lanes (%):		151.1				Total Delay Over All Lanes (pcuHr):		4.12							

Network Layout Diagram

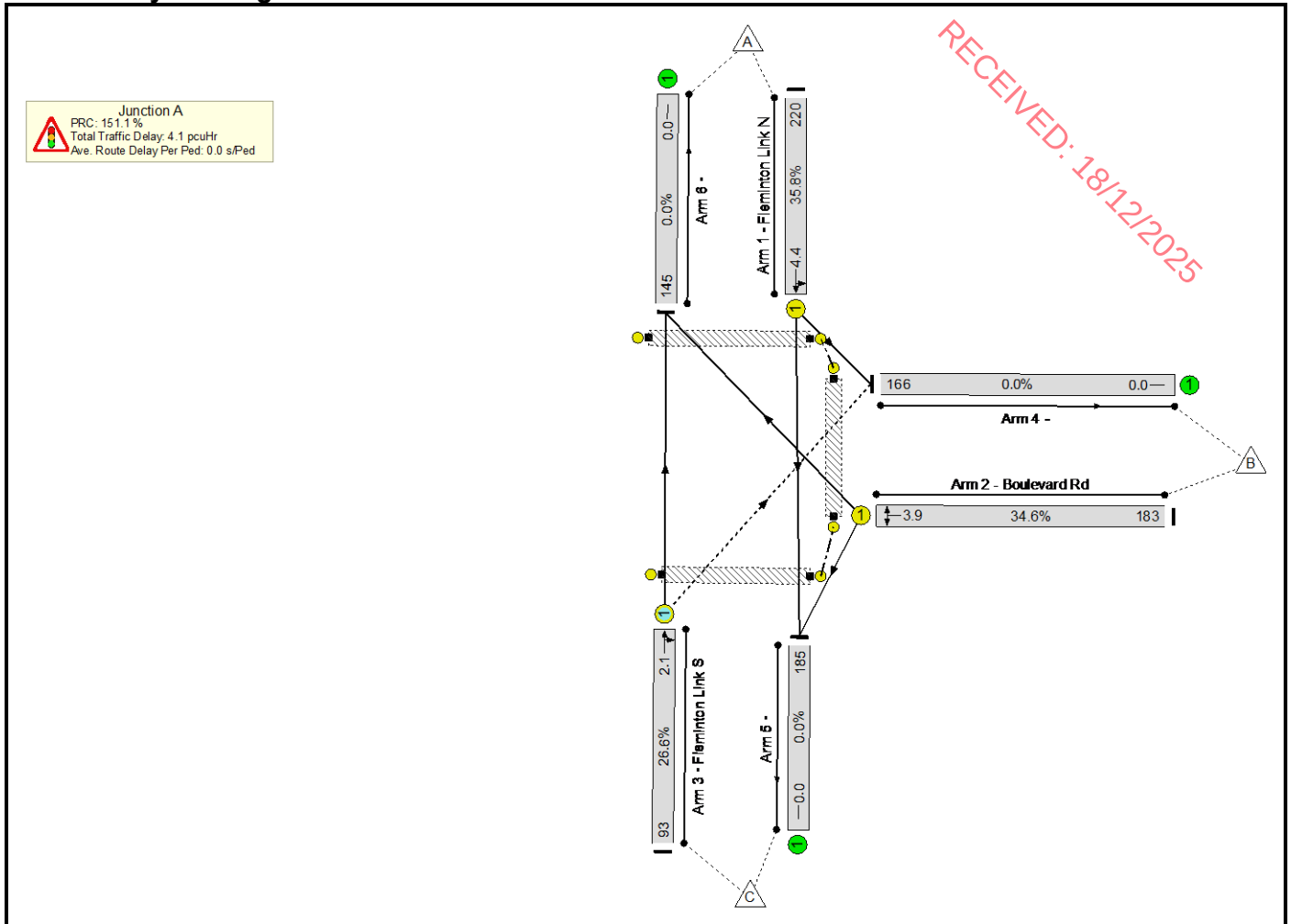


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	38.9%	51	26	0	4.9	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	38.9%	51	26	0	4.9	-	-
1/1	Fleminton Link N Left Ahead	U	A		1	20	-	-	170	1905	444	38.2%	-	-	-	1.7	35.6	3.9
2/1	Boulevard Rd Left Right	U	B	F	1	25	0	-	214	1905	550	38.9%	-	-	-	1.8	31.0	4.6
3/1	Fleminton Link S Right Ahead	O	C	H	1	27	0	-	148	1915	383	38.7%	51	26	0	1.4	34.6	3.4
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 131.4 Total Delay for Signalled Lanes (pcuHr): 4.94 Cycle Time (s): 90 PRC Over All Lanes (%): 131.4 Total Delay Over All Lanes(pcuHr): 4.94																		

Network Layout Diagram

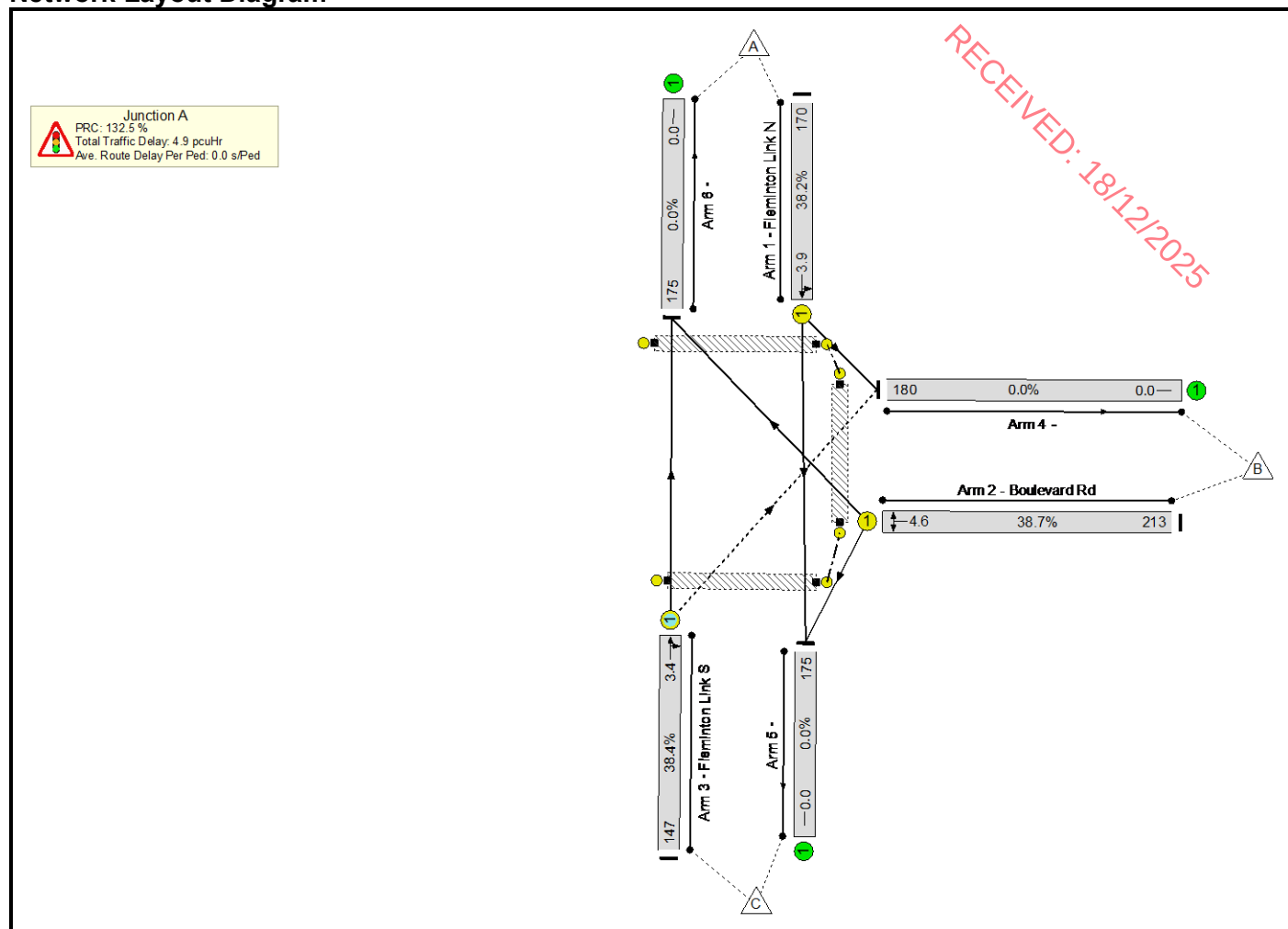


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	35.8%	27	22	0	4.1	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	35.8%	27	22	0	4.1	-	-
1/1	Fleminton Link N Left Ahead	U	A		1	28	-	-	220	1905	614	35.8%	-	-	-	1.7	27.9	4.4
2/1	Boulevard Rd Left Right	U	B	F	1	24	0	-	183	1905	529	34.6%	-	-	-	1.6	31.2	3.9
3/1	Fleminton Link S Right Ahead	O	C	H	1	28	0	-	93	1915	350	26.6%	27	22	0	0.8	31.2	2.1
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 151.1 Total Delay for Signalled Lanes (pcuHr): 4.10 Cycle Time (s): 90 PRC Over All Lanes (%): 151.1 Total Delay Over All Lanes(pcuHr): 4.10																		

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	38.7%	50	26	0	4.9	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	38.7%	50	26	0	4.9	-	-
1/1	Fleminton Link N Left Ahead	U	A		1	20	-	-	170	1905	444	38.2%	-	-	-	1.7	35.6	3.9
2/1	Boulevard Rd Left Right	U	B	F	1	25	0	-	213	1905	550	38.7%	-	-	-	1.8	30.9	4.6
3/1	Fleminton Link S Right Ahead	O	C	H	1	27	0	-	147	1915	383	38.4%	50	26	0	1.4	34.5	3.4
Ped Link: P1	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P2	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
Ped Link: P3	Unnamed Ped Link	-			0	0	-	-	0	-	0	0.0%	-	-	-	Inf	Inf	Inf
C1 PRC for Signalled Lanes (%): 132.5 Total Delay for Signalled Lanes (pcuHr): 4.92 Cycle Time (s): 90 PRC Over All Lanes (%): 132.5 Total Delay Over All Lanes(pcuHr): 4.92																		

Site Access 2 – C Ring Road/ Hamlet Lane Modelling Report

RECEIVED: 18/12/2025

Basic Results Summary
Basic Results Summary

User and Project Details

Project:	
Title:	
Location:	
Additional detail:	
File name:	Site_Access_02 Jn B v0.2.lsg3x
Author:	
Company:	
Address:	
Linsig Version:	3, 3, 0, 6

RECEIVED: 18/12/2025

Scenarios

Number	Scenario Name	Flow Group	Network Control Plan	Time	Cycle Time (s)	PRC (%)	Delay (pcuHr)
1	DM 2027	YoO DM (2027) AM	Network Control Plan 1	08:00 - 09:00	90	470.0	2.09
2	DM 2027	YoO DM (2027) PM	Network Control Plan 1	16:45 - 17:45	90	323.7	2.37
3	DM 2032	YoO+5 DM (2032) AM	Network Control Plan 1	08:00 - 09:00	90	470.0	2.09
4	DM 2032	YoO+5 DM (2032) PM	Network Control Plan 1	16:45 - 17:45	90	323.7	2.37
5	DM 2042	YoO+15 DM (2042) AM	Network Control Plan 1	08:00 - 09:00	90	470.0	2.09
6	DM 2042	YoO+15 DM (2042) PM	Network Control Plan 1	16:45 - 17:45	90	323.7	2.37
7	DS 2027	YoO DS (2027) AM	Network Control Plan 1	08:00 - 09:00	90	311.7	3.10
8	DS 2027	YoO DS (2027) PM	Network Control Plan 1	16:45 - 17:45	90	210.2	3.31
9	DS 2032	YoO+5 DS (2032) AM	Network Control Plan 1	08:00 - 09:00	90	311.7	3.10
10	DS 2032	YoO+5 DS (2032) PM	Network Control Plan 1	16:45 - 17:45	90	210.2	3.31
11	DS 2042	YoO+15 DS (2042) AM	Network Control Plan 1	08:00 - 09:00	90	311.7	3.10
12	DS 2042	YoO+15 DS (2042) PM	Network Control Plan 1	16:45 - 17:45	90	210.2	3.31

Network Layout Diagram

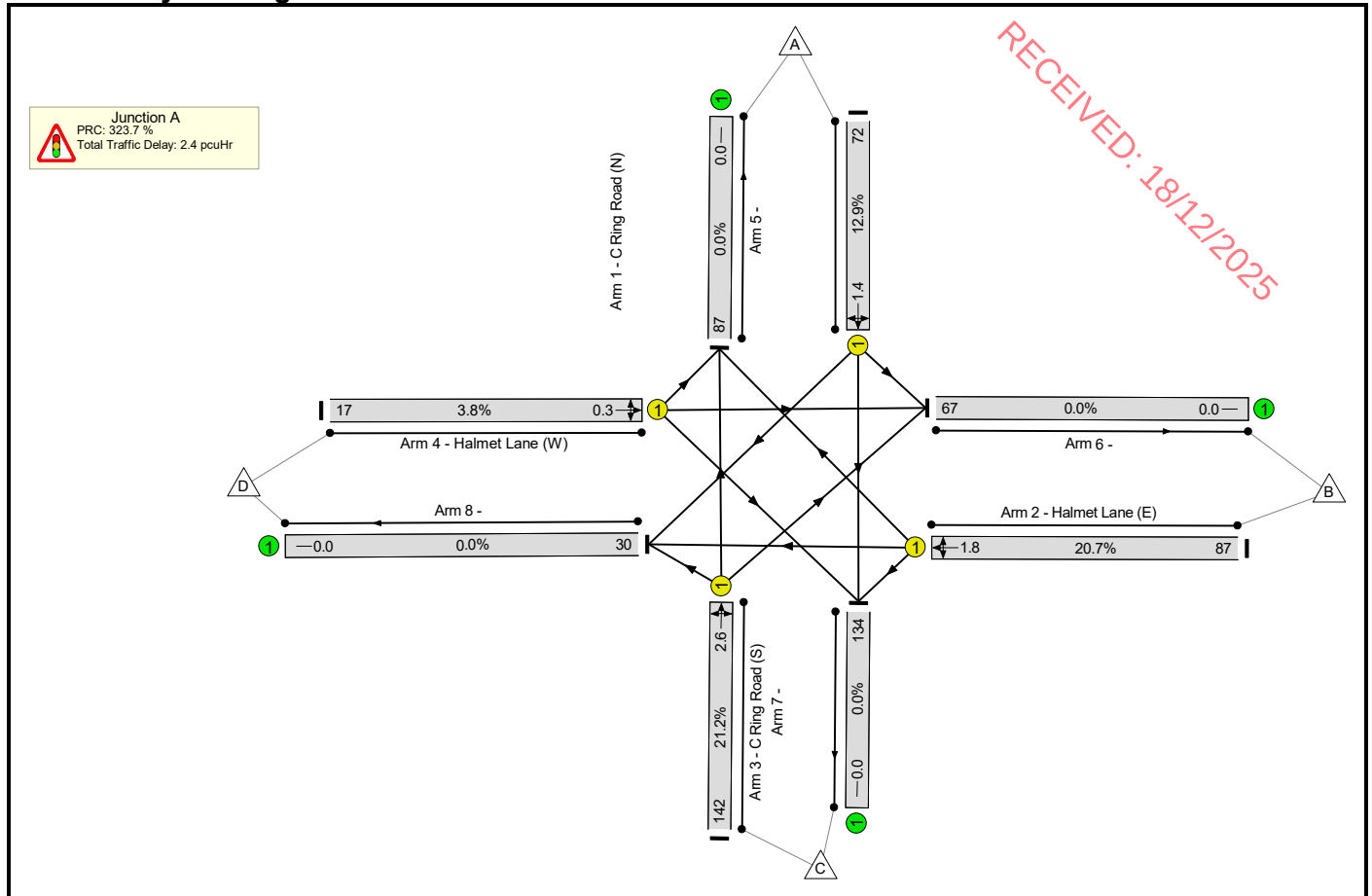


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	15.8%	0	0	0	2.1	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	15.8%	0	0	0	2.1	-	-
1/1	C Ring Road (N) Left Ahead Right	U	A		1	30	-	-	89	1891	651	13.7%	-	-	-	0.6	23.5	1.6
2/1	Halmet Lane (E) Right Left Ahead	U	B		1	18	-	-	52	1629	344	15.1%	-	-	-	0.5	35.1	1.1
3/1	C Ring Road (S) Ahead Right Left	U	C		1	35	-	-	121	1916	766	15.8%	-	-	-	0.7	20.1	2.0
4/1	Halmet Lane (W) Left Ahead Right	U	D		1	18	-	-	35	1762	372	9.4%	-	-	-	0.3	34.0	0.8
C1					PRC for Signalled Lanes (%):			470.0	Total Delay for Signalled Lanes (pcuHr):				2.09	Cycle Time (s): 90				
					PRC Over All Lanes (%):			470.0	Total Delay Over All Lanes(pcuHr):				2.09					

Network Layout Diagram

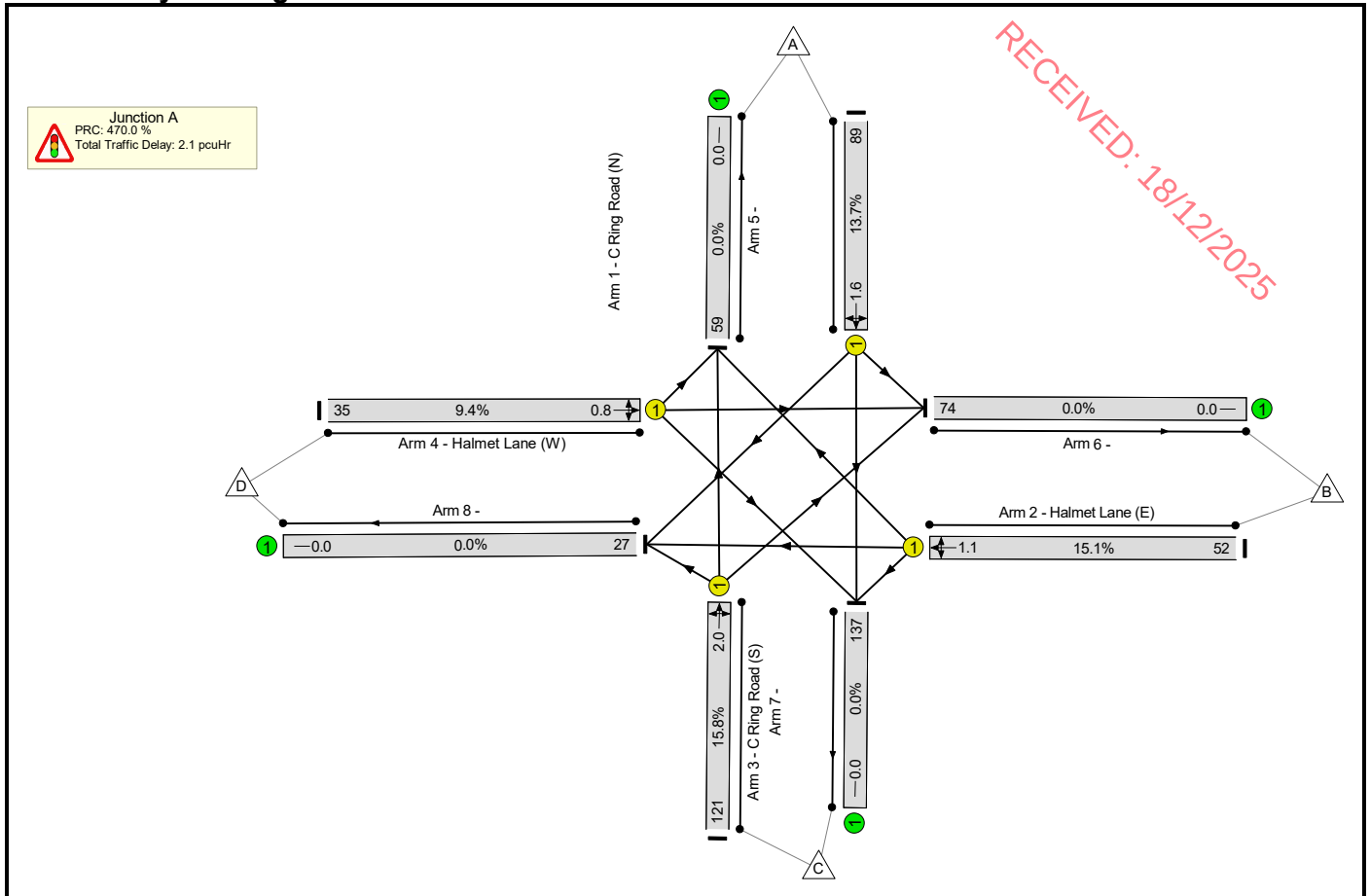


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	21.2%	0	0	0	2.4	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	21.2%	0	0	0	2.4	-	-
1/1	C Ring Road (N) Left Ahead Right	U	A		1	26	-	-	72	1864	559	12.9%	-	-	-	0.5	26.7	1.4
2/1	Halmet Lane (E) Right Left Ahead	U	B		1	22	-	-	87	1644	420	20.7%	-	-	-	0.8	31.8	1.8
3/1	C Ring Road (S) Ahead Right Left	U	C		1	31	-	-	142	1880	668	21.2%	-	-	-	0.9	23.6	2.6
4/1	Halmet Lane (W) Left Ahead Right	U	D		1	22	-	-	17	1762	450	3.8%	-	-	-	0.1	29.5	0.3
C1					PRC for Signalled Lanes (%):			323.7	Total Delay for Signalled Lanes (pcuHr):				2.37	Cycle Time (s): 90				
					PRC Over All Lanes (%):			323.7	Total Delay Over All Lanes(pcuHr):				2.37					

Network Layout Diagram

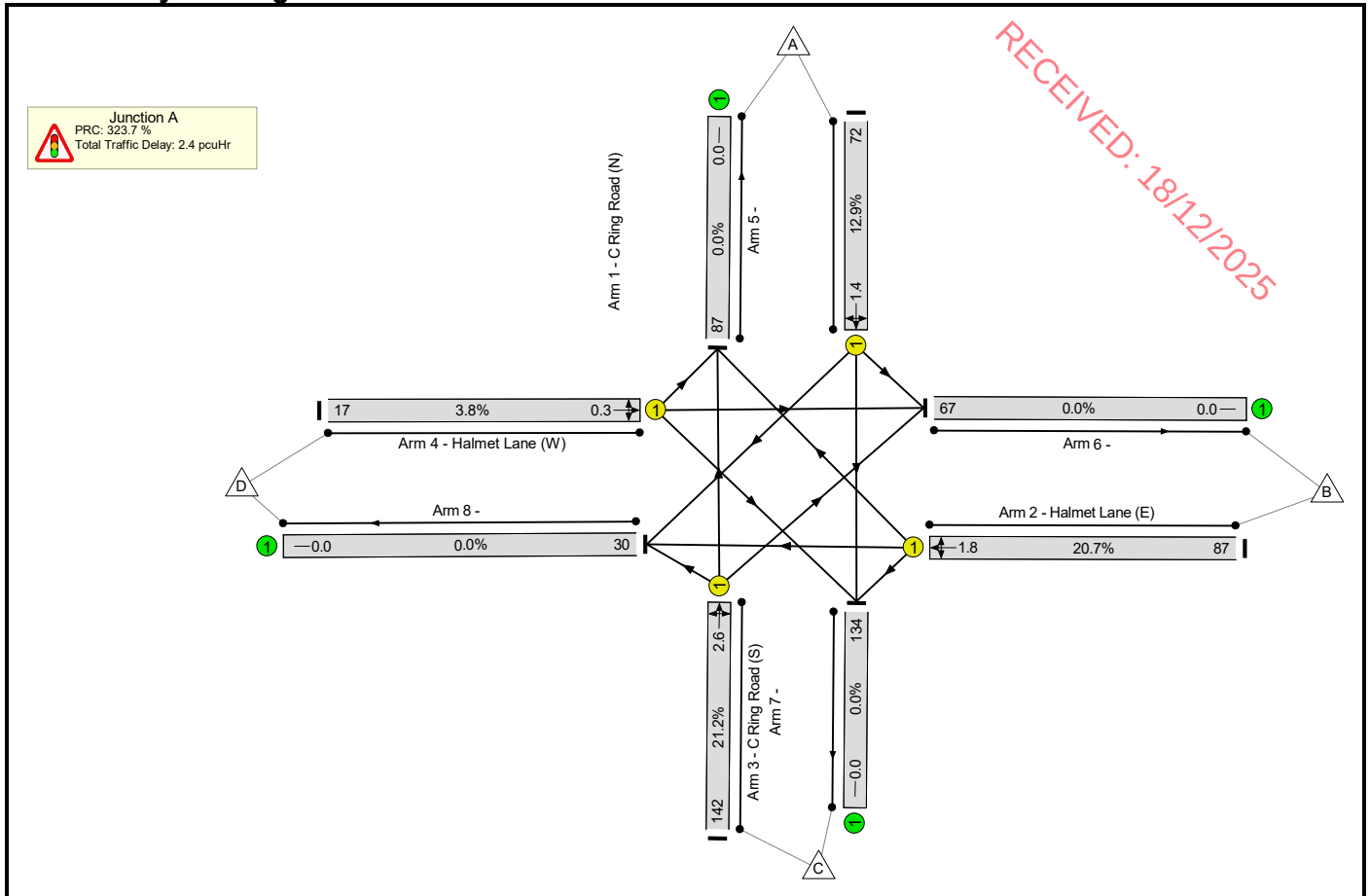


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	15.8%	0	0	0	2.1	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	15.8%	0	0	0	2.1	-	-
1/1	C Ring Road (N) Left Ahead Right	U	A		1	30	-	-	89	1891	651	13.7%	-	-	-	0.6	23.5	1.6
2/1	Halmet Lane (E) Right Left Ahead	U	B		1	18	-	-	52	1629	344	15.1%	-	-	-	0.5	35.1	1.1
3/1	C Ring Road (S) Ahead Right Left	U	C		1	35	-	-	121	1916	766	15.8%	-	-	-	0.7	20.1	2.0
4/1	Halmet Lane (W) Left Ahead Right	U	D		1	18	-	-	35	1762	372	9.4%	-	-	-	0.3	34.0	0.8
C1					PRC for Signalled Lanes (%):			470.0	Total Delay for Signalled Lanes (pcuHr):				2.09	Cycle Time (s): 90				
					PRC Over All Lanes (%):			470.0	Total Delay Over All Lanes(pcuHr):				2.09					

Network Layout Diagram

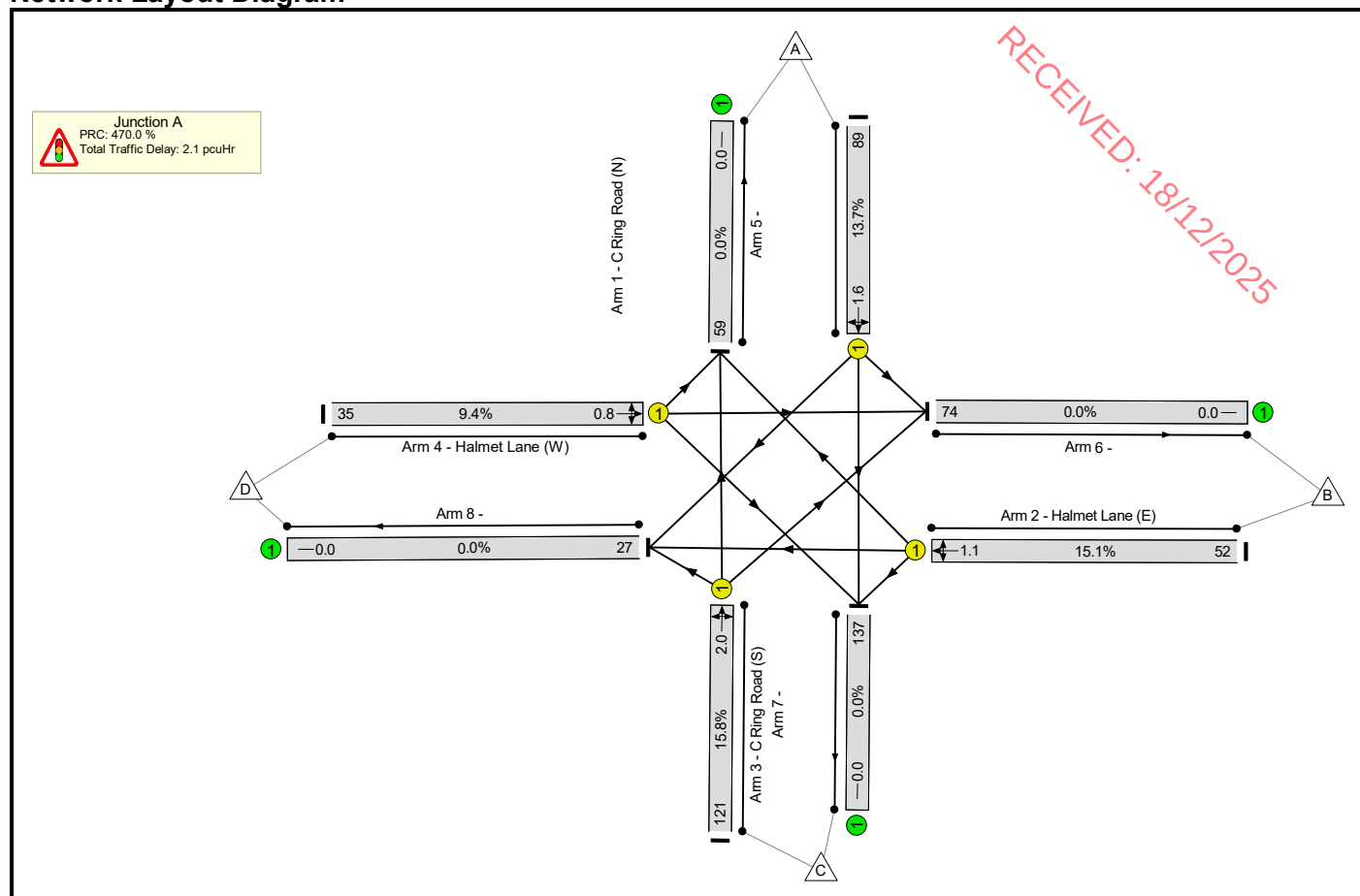


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	21.2%	0	0	0	2.4	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	21.2%	0	0	0	2.4	-	-
1/1	C Ring Road (N) Left Ahead Right	U	A		1	26	-	-	72	1864	559	12.9%	-	-	-	0.5	26.7	1.4
2/1	Halmet Lane (E) Right Left Ahead	U	B		1	22	-	-	87	1644	420	20.7%	-	-	-	0.8	31.8	1.8
3/1	C Ring Road (S) Ahead Right Left	U	C		1	31	-	-	142	1880	668	21.2%	-	-	-	0.9	23.6	2.6
4/1	Halmet Lane (W) Left Ahead Right	U	D		1	22	-	-	17	1762	450	3.8%	-	-	-	0.1	29.5	0.3
C1					PRC for Signalled Lanes (%):			323.7	Total Delay for Signalled Lanes (pcuHr):				2.37	Cycle Time (s): 90				
					PRC Over All Lanes (%):			323.7	Total Delay Over All Lanes(pcuHr):				2.37					

Network Layout Diagram

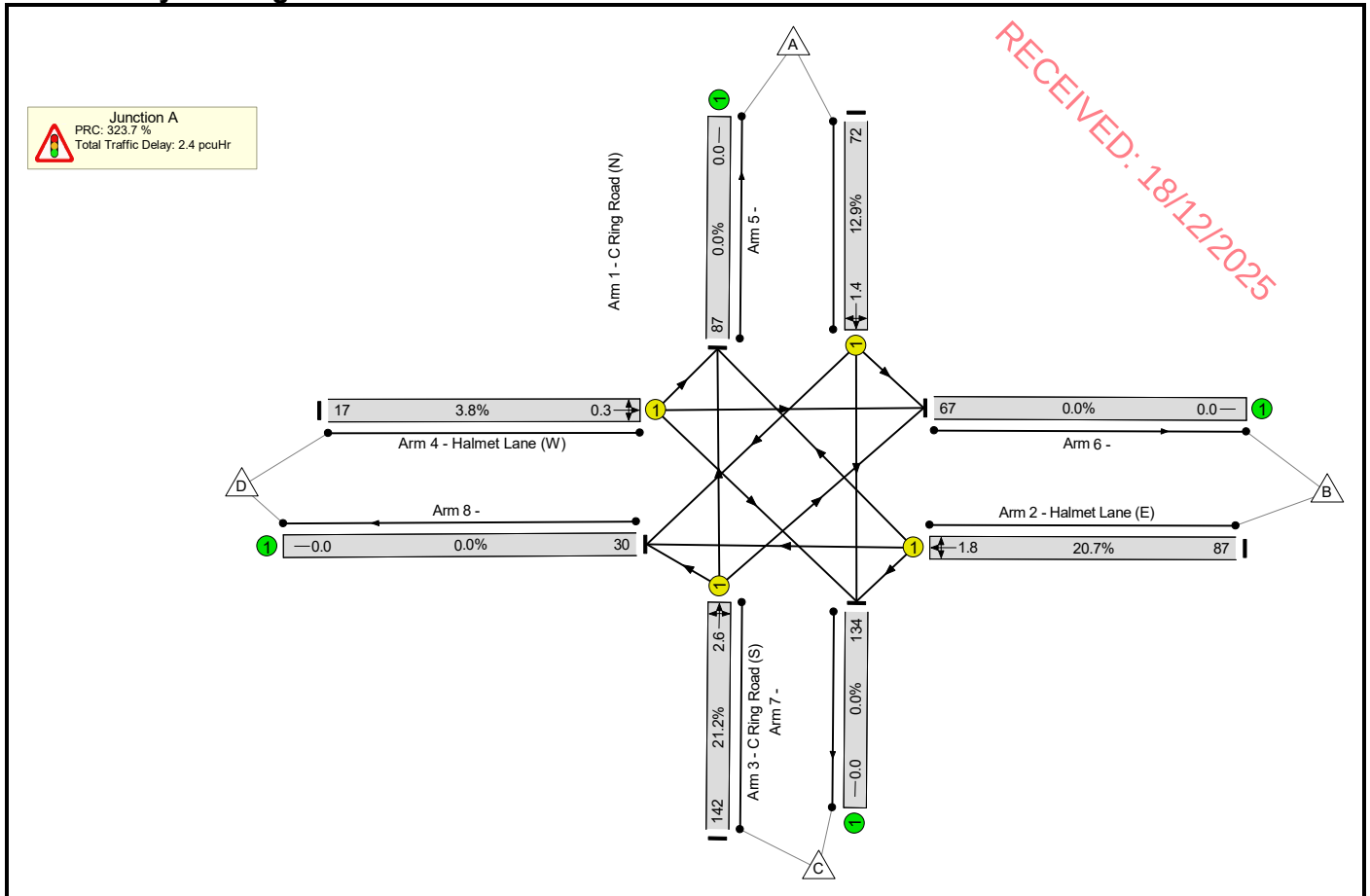


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	15.8%	0	0	0	2.1	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	15.8%	0	0	0	2.1	-	-
1/1	C Ring Road (N) Left Ahead Right	U	A		1	30	-	-	89	1891	651	13.7%	-	-	-	0.6	23.5	1.6
2/1	Halmet Lane (E) Right Left Ahead	U	B		1	18	-	-	52	1629	344	15.1%	-	-	-	0.5	35.1	1.1
3/1	C Ring Road (S) Ahead Right Left	U	C		1	35	-	-	121	1916	766	15.8%	-	-	-	0.7	20.1	2.0
4/1	Halmet Lane (W) Left Ahead Right	U	D		1	18	-	-	35	1762	372	9.4%	-	-	-	0.3	34.0	0.8
C1					PRC for Signalled Lanes (%):			470.0	Total Delay for Signalled Lanes (pcuHr):				2.09	Cycle Time (s): 90				
					PRC Over All Lanes (%):			470.0	Total Delay Over All Lanes(pcuHr):				2.09					

Network Layout Diagram

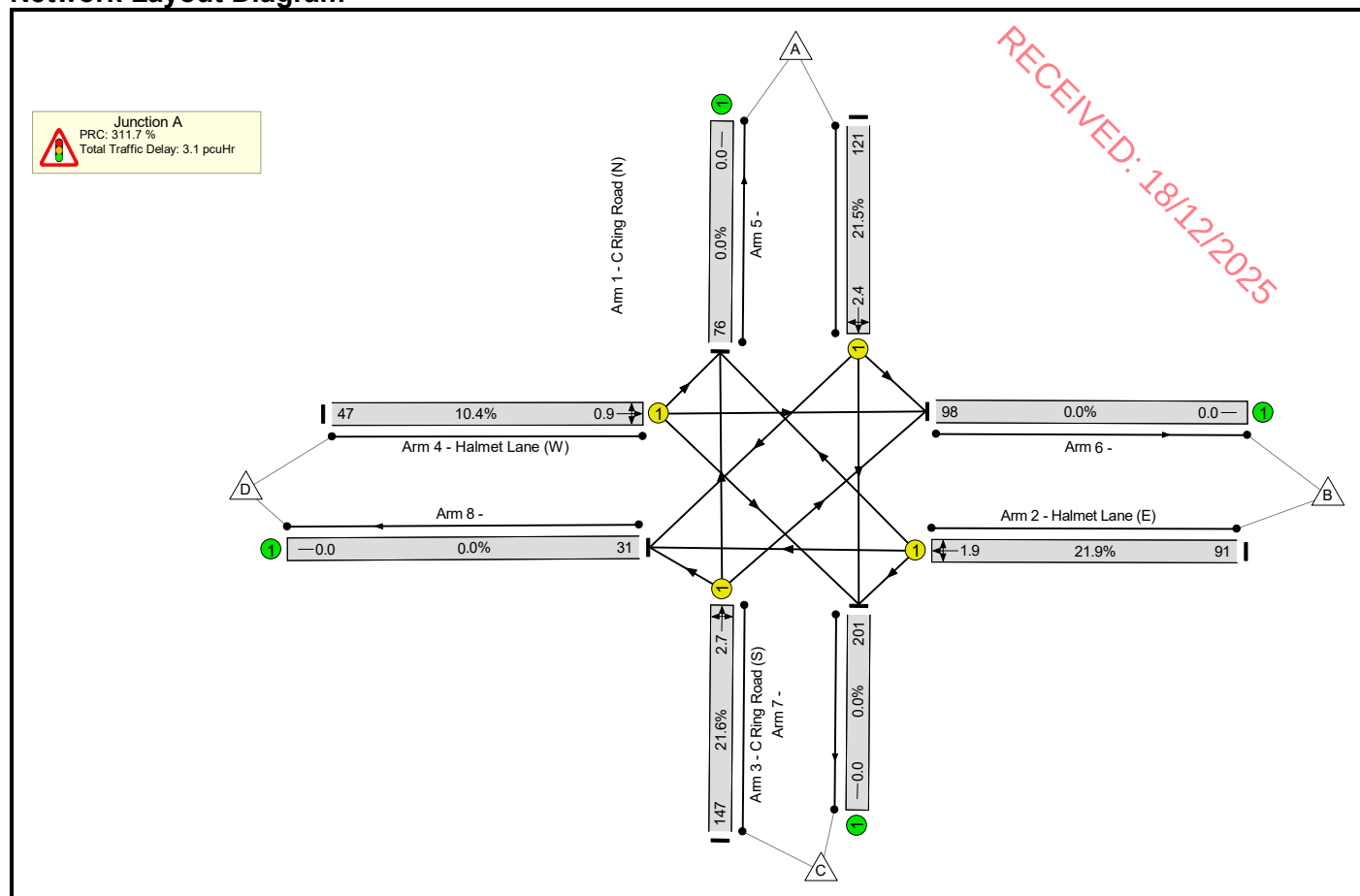


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	21.2%	0	0	0	2.4	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	21.2%	0	0	0	2.4	-	-
1/1	C Ring Road (N) Left Ahead Right	U	A		1	26	-	-	72	1864	559	12.9%	-	-	-	0.5	26.7	1.4
2/1	Halmet Lane (E) Right Left Ahead	U	B		1	22	-	-	87	1644	420	20.7%	-	-	-	0.8	31.8	1.8
3/1	C Ring Road (S) Ahead Right Left	U	C		1	31	-	-	142	1880	668	21.2%	-	-	-	0.9	23.6	2.6
4/1	Halmet Lane (W) Left Ahead Right	U	D		1	22	-	-	17	1762	450	3.8%	-	-	-	0.1	29.5	0.3
C1					PRC for Signalled Lanes (%):			323.7	Total Delay for Signalled Lanes (pcuHr):				2.37	Cycle Time (s): 90				
					PRC Over All Lanes (%):			323.7	Total Delay Over All Lanes(pcuHr):				2.37					

Network Layout Diagram

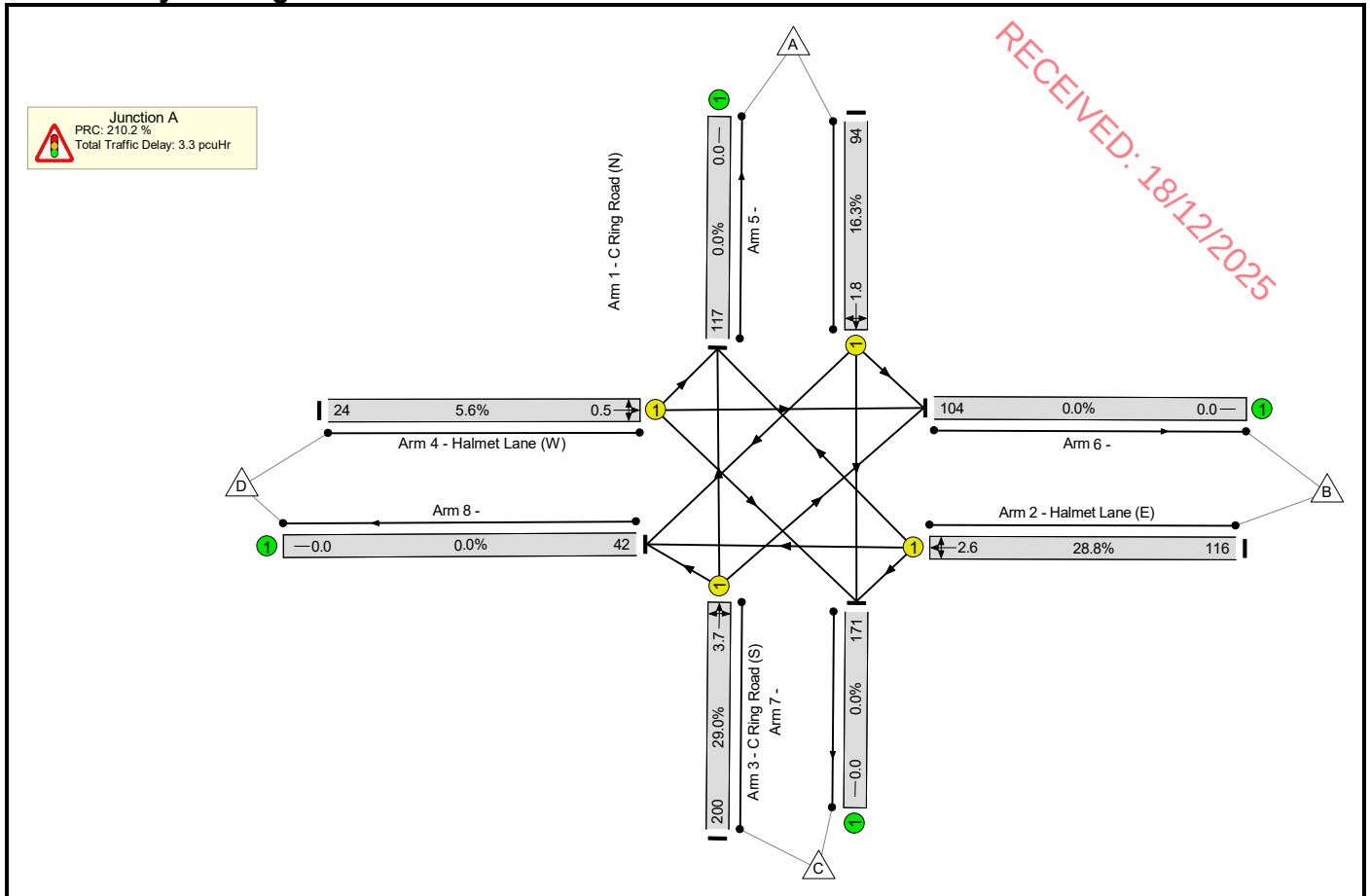


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	21.9%	0	0	0	3.1	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	21.9%	0	0	0	3.1	-	-
1/1	C Ring Road (N) Left Ahead Right	U	A		1	26	-	-	121	1878	563	21.5%	-	-	-	0.9	27.7	2.4
2/1	Halmet Lane (E) Right Left Ahead	U	B		1	22	-	-	91	1629	416	21.9%	-	-	-	0.8	31.9	1.9
3/1	C Ring Road (S) Ahead Right Left	U	C		1	31	-	-	147	1912	680	21.6%	-	-	-	1.0	23.6	2.7
4/1	Halmet Lane (W) Left Ahead Right	U	D		1	22	-	-	47	1761	450	10.4%	-	-	-	0.4	30.1	0.9
C1					PRC for Signalled Lanes (%):			311.7	Total Delay for Signalled Lanes (pcuHr):				3.10	Cycle Time (s): 90				
					PRC Over All Lanes (%):			311.7	Total Delay Over All Lanes(pcuHr):				3.10					

Network Layout Diagram

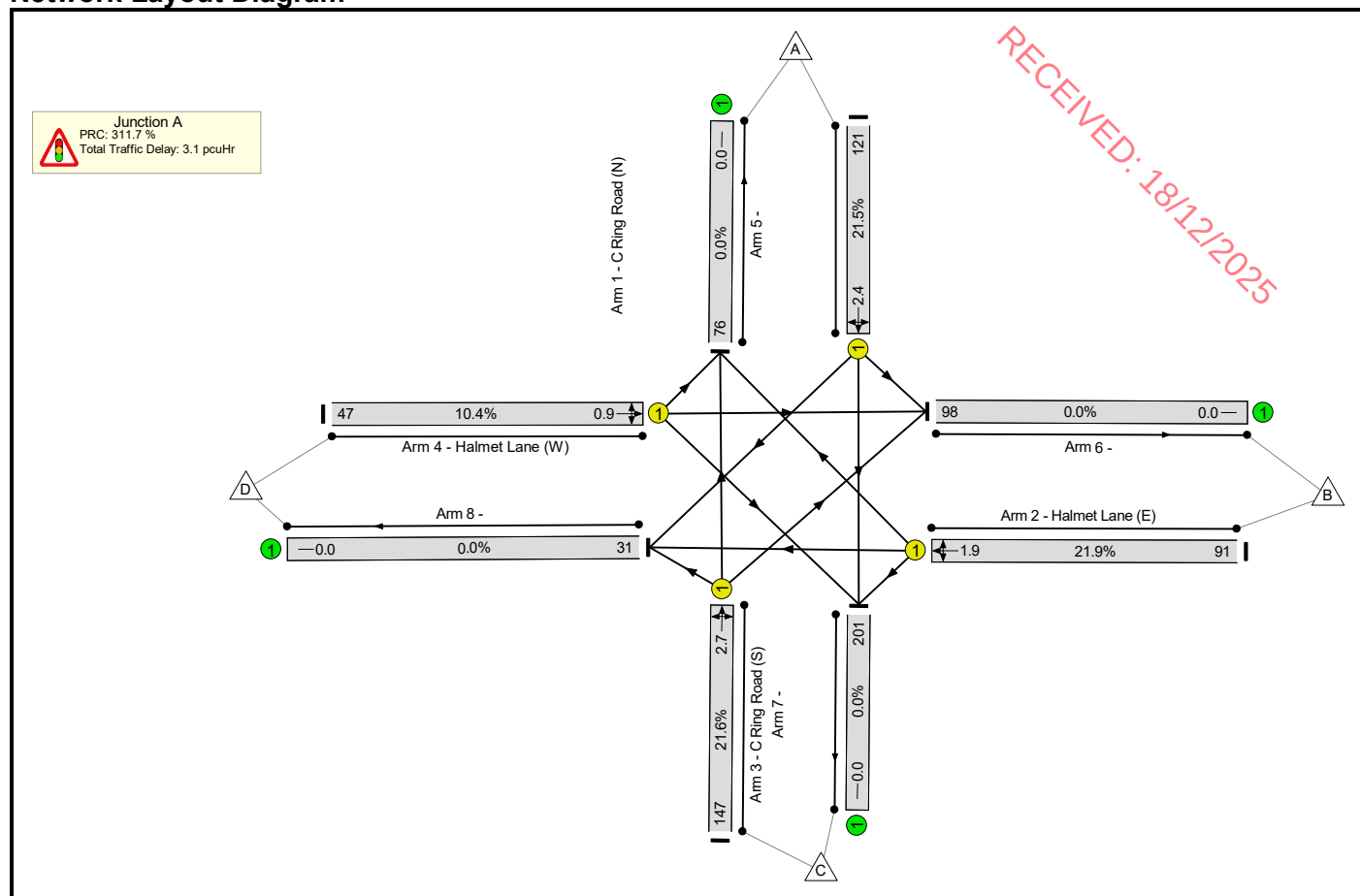


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	29.0%	0	0	0	3.3	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	29.0%	0	0	0	3.3	-	-
1/1	C Ring Road (N) Left Ahead Right	U	A		1	27	-	-	94	1851	576	16.3%	-	-	-	0.7	26.3	1.8
2/1	Halmet Lane (E) Right Left Ahead	U	B		1	21	-	-	116	1647	403	28.8%	-	-	-	1.1	33.9	2.6
3/1	C Ring Road (S) Ahead Right Left	U	C		1	32	-	-	200	1880	689	29.0%	-	-	-	1.3	23.9	3.7
4/1	Halmet Lane (W) Left Ahead Right	U	D		1	21	-	-	24	1764	431	5.6%	-	-	-	0.2	30.5	0.5
C1					PRC for Signalled Lanes (%):			210.2	Total Delay for Signalled Lanes (pcuHr):				3.31	Cycle Time (s): 90				
					PRC Over All Lanes (%):			210.2	Total Delay Over All Lanes(pcuHr):				3.31					

Network Layout Diagram



Basic Results Summary

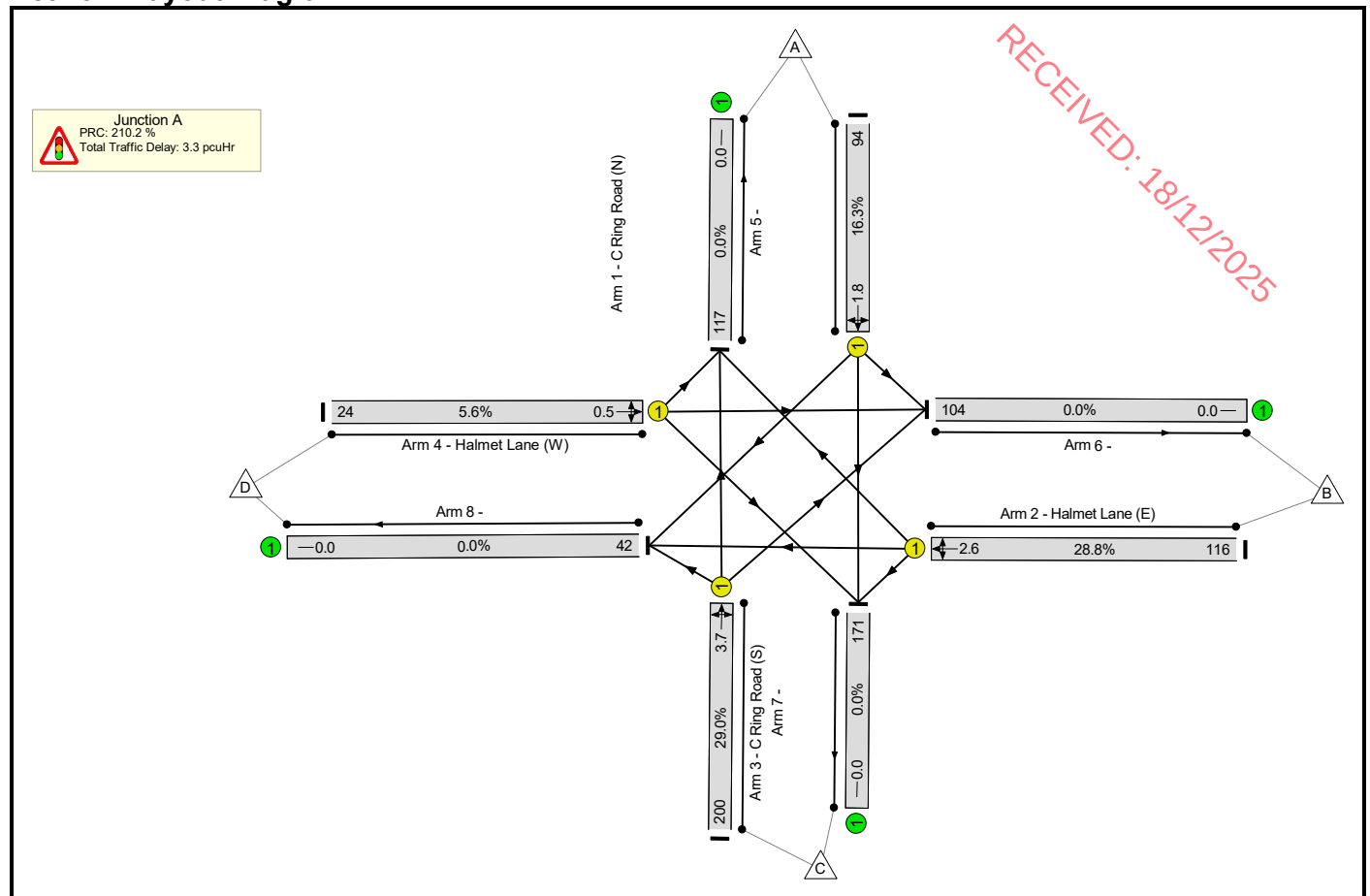
Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	21.9%	0	0	0	3.1	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	21.9%	0	0	0	3.1	-	-
1/1	C Ring Road (N) Left Ahead Right	U	A		1	26	-	-	121	1878	563	21.5%	-	-	-	0.9	27.7	2.4
2/1	Halmet Lane (E) Right Left Ahead	U	B		1	22	-	-	91	1629	416	21.9%	-	-	-	0.8	31.9	1.9
3/1	C Ring Road (S) Ahead Right Left	U	C		1	31	-	-	147	1912	680	21.6%	-	-	-	1.0	23.6	2.7
4/1	Halmet Lane (W) Left Ahead Right	U	D		1	22	-	-	47	1761	450	10.4%	-	-	-	0.4	30.1	0.9
C1					PRC for Signalled Lanes (%):			311.7	Total Delay for Signalled Lanes (pcuHr):				3.10	Cycle Time (s): 90				
					PRC Over All Lanes (%):			311.7	Total Delay Over All Lanes(pcuHr):				3.10					

Basic Results Summary

Scenario 10: 'DS 2032' (FG10: 'YoO+5 DS (2032) PM ', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

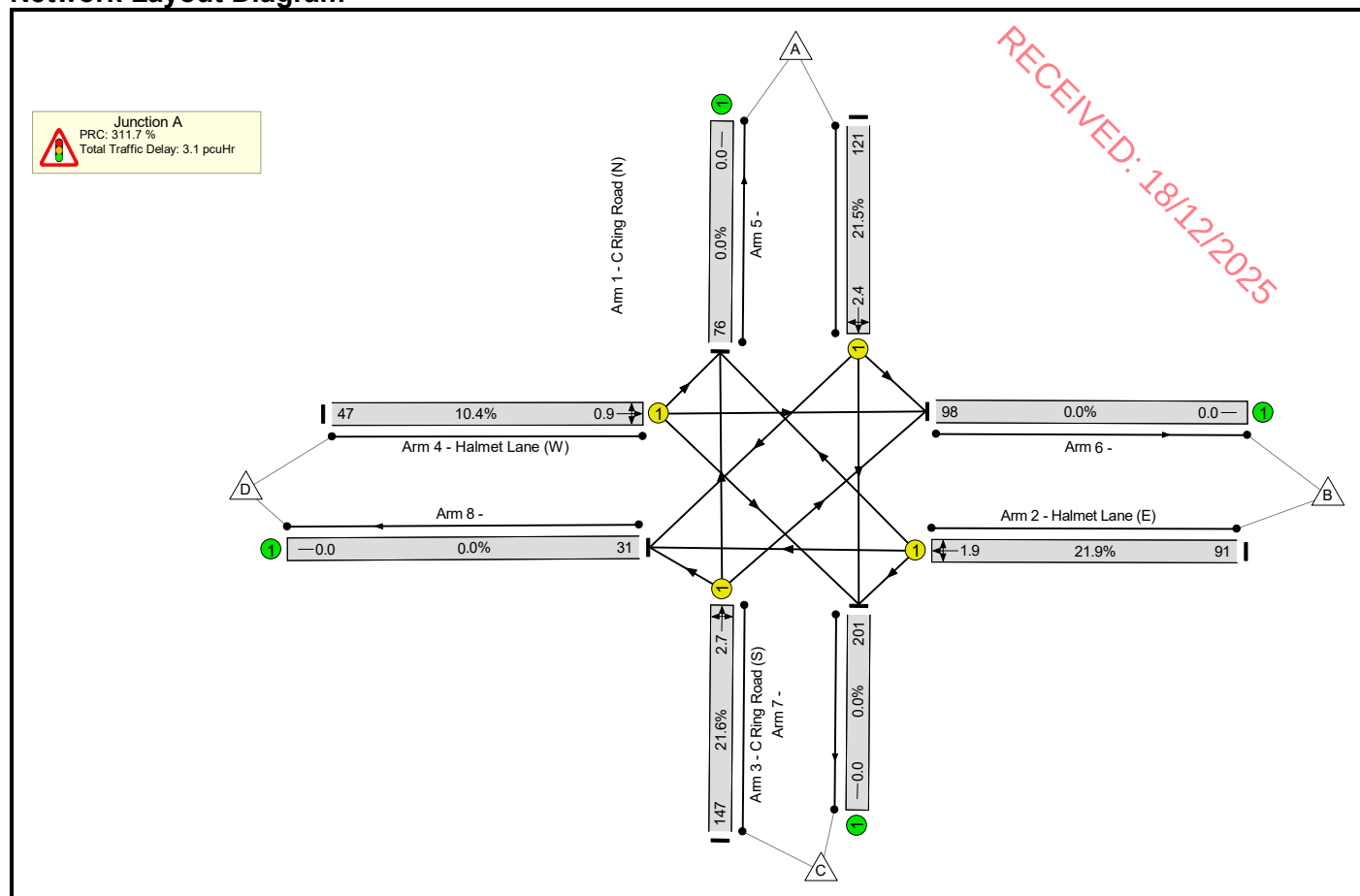


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)	
Network	-	-	-		-	-	-	-	-	-	-	29.0%	0	0	0	3.3	-	-	
Junction A	-	-	-		-	-	-	-	-	-	-	29.0%	0	0	0	3.3	-	-	
1/1	C Ring Road (N) Left Ahead Right	U	A		1	27	-	-	94	1851	576	16.3%	-	-	-	0.7	26.3	1.8	
2/1	Halmet Lane (E) Right Left Ahead	U	B		1	21	-	-	116	1647	403	28.8%	-	-	-	1.1	33.9	2.6	
3/1	C Ring Road (S) Ahead Right Left	U	C		1	32	-	-	200	1880	689	29.0%	-	-	-	1.3	23.9	3.7	
4/1	Halmet Lane (W) Left Ahead Right	U	D		1	21	-	-	24	1764	431	5.6%	-	-	-	0.2	30.5	0.5	
C1					PRC for Signalled Lanes (%):			210.2	Total Delay for Signalled Lanes (pcuHr):			3.31	Cycle Time (s):			90			
					PRC Over All Lanes (%):			210.2	Total Delay Over All Lanes (pcuHr):			3.31							

Network Layout Diagram

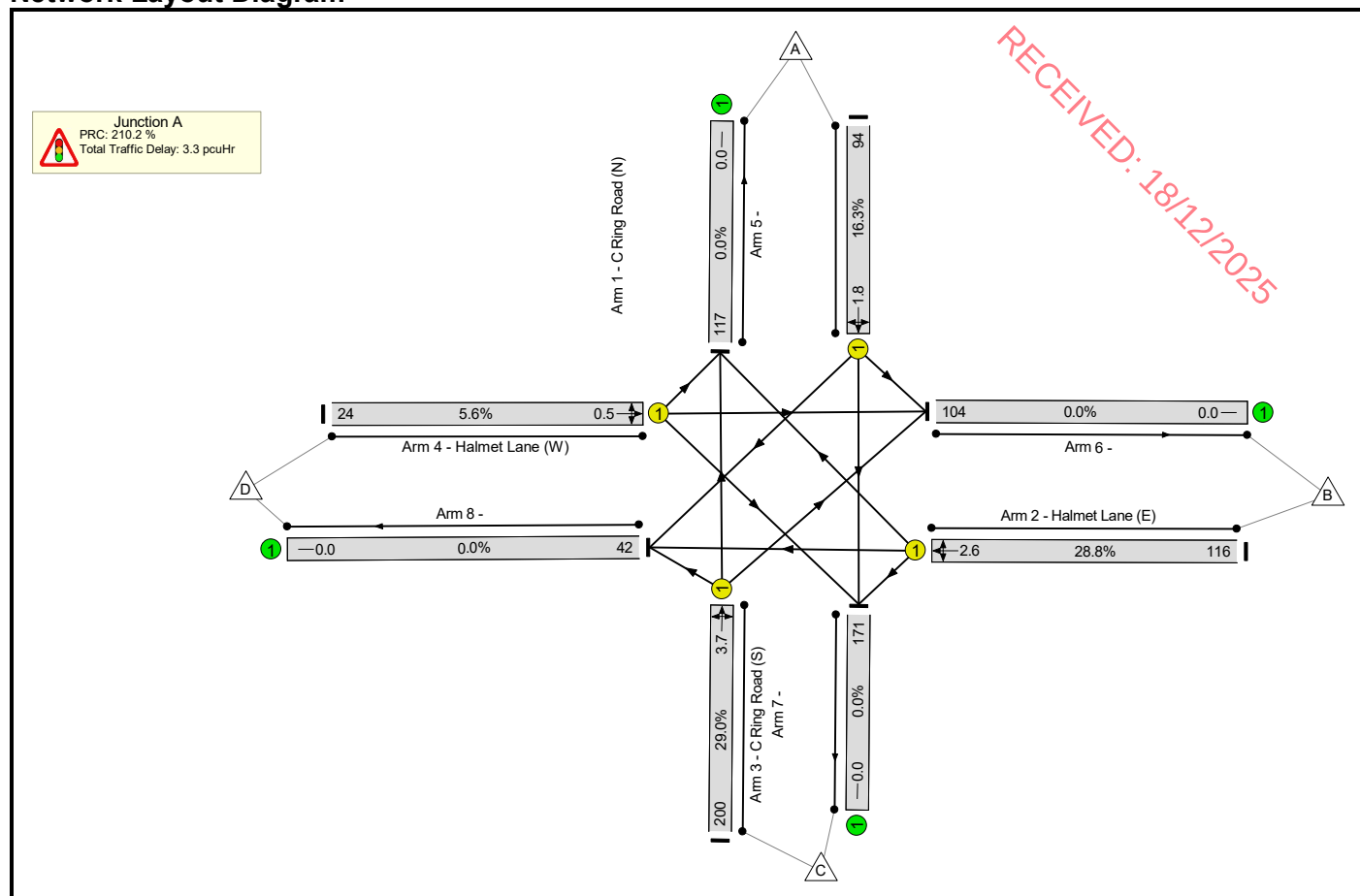


Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	21.9%	0	0	0	3.1	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	21.9%	0	0	0	3.1	-	-
1/1	C Ring Road (N) Left Ahead Right	U	A		1	26	-	-	121	1878	563	21.5%	-	-	-	0.9	27.7	2.4
2/1	Halmet Lane (E) Right Left Ahead	U	B		1	22	-	-	91	1629	416	21.9%	-	-	-	0.8	31.9	1.9
3/1	C Ring Road (S) Ahead Right Left	U	C		1	31	-	-	147	1912	680	21.6%	-	-	-	1.0	23.6	2.7
4/1	Halmet Lane (W) Left Ahead Right	U	D		1	22	-	-	47	1761	450	10.4%	-	-	-	0.4	30.1	0.9
C1					PRC for Signalled Lanes (%):			311.7	Total Delay for Signalled Lanes (pcuHr):				3.10	Cycle Time (s): 90				
					PRC Over All Lanes (%):			311.7	Total Delay Over All Lanes(pcuHr):				3.10					

Network Layout Diagram



Basic Results Summary

Network Results

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Bonus Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network	-	-	-		-	-	-	-	-	-	-	29.0%	0	0	0	3.3	-	-
Junction A	-	-	-		-	-	-	-	-	-	-	29.0%	0	0	0	3.3	-	-
1/1	C Ring Road (N) Left Ahead Right	U	A		1	27	-	-	94	1851	576	16.3%	-	-	-	0.7	26.3	1.8
2/1	Halmet Lane (E) Right Left Ahead	U	B		1	21	-	-	116	1647	403	28.8%	-	-	-	1.1	33.9	2.6
3/1	C Ring Road (S) Ahead Right Left	U	C		1	32	-	-	200	1880	689	29.0%	-	-	-	1.3	23.9	3.7
4/1	Halmet Lane (W) Left Ahead Right	U	D		1	21	-	-	24	1764	431	5.6%	-	-	-	0.2	30.5	0.5
C1					PRC for Signalled Lanes (%):			210.2	Total Delay for Signalled Lanes (pcuHr):				3.31	Cycle Time (s): 90				
					PRC Over All Lanes (%):			210.2	Total Delay Over All Lanes(pcuHr):				3.31					

Site Access 3 – C Ring Road/ Flemington Lane Modelling Report

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Junctions 9										
PICADY 9 - Priority Intersection Module										
Version: 9.5.1.7462 © Copyright TRL Limited, 2019										
For sales and distribution information, program advice and maintenance, contact TRL: +44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk										
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Filename: 20250707 C1266 Modelling_v2.j9

Path: C:\Users\Akshai\Transport Insights\TI - Projects 2025\C1266 2025 Glenveagh Flemington Lane Balbriggan LRD\Modelling and Analysis\Modelling\PICADY\Site Access 3 Flem Ln Link Road

Report generation date: 21/08/2025 11:54:52

- »2025, AM
- »2025, PM
- »2027 YoO DS, AM
- »2027 YoO DS, PM
- »2032 YoO+5 DS, AM
- »2032 YoO+5 DS, PM
- »2042 YoO+15 DS, AM
- »2042 YoO+15 DS, PM

Summary of junction performance

	AM					PM				
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Set ID	Queue (PCU)	Delay (s)	RFC	LOS
	2025									
Stream B-AC	D1	0.0	0.00	0.00	A	D2	0.0	0.00	0.00	A
Stream C-AB		0.0	0.00	0.00	A		0.0	0.00	0.00	A
	2027 YoO DS									
Stream B-AC	D3	0.1	7.76	0.12	A	D4	0.1	7.09	0.06	A
Stream C-AB		0.0	5.86	0.02	A		0.1	5.81	0.05	A
	2032 YoO+5 DS									
Stream B-AC	D5	0.1	7.79	0.12	A	D6	0.1	7.12	0.06	A
Stream C-AB		0.0	5.86	0.02	A		0.1	5.79	0.05	A
	2042 YoO+15 DS									
Stream B-AC	D7	0.1	7.85	0.12	A	D8	0.1	7.13	0.06	A
Stream C-AB		0.0	5.84	0.02	A		0.1	5.77	0.05	A

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

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

File summary

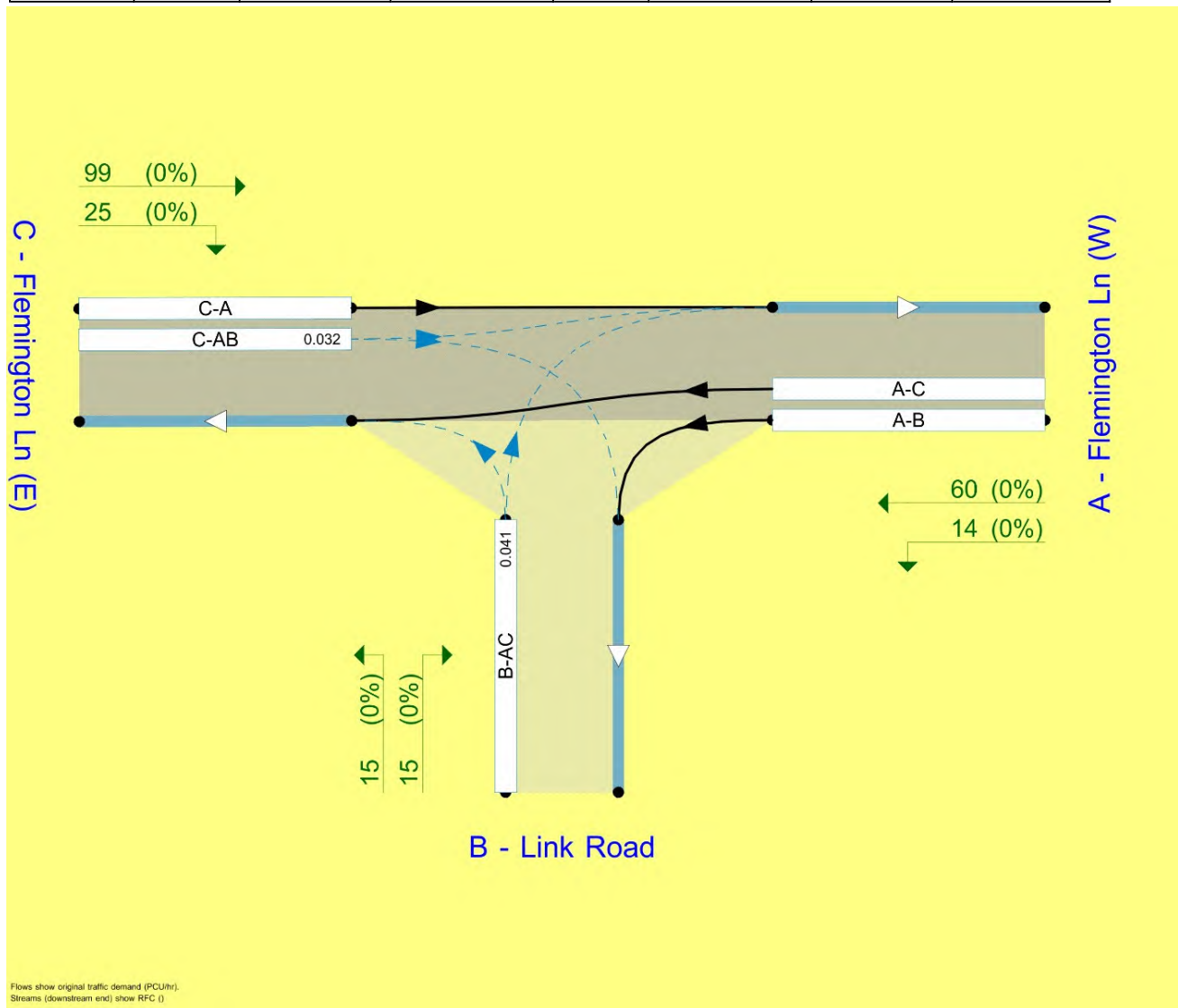
File Description

Title	
Location	
Site number	
Date	07/07/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	AzureAD\TomFitzgerald
Description	

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Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2025	AM	ONE HOUR	08:00	09:30	15	✓
D2	2025	PM	ONE HOUR	16:45	18:15	15	✓
D3	2027 YoO DS	AM	ONE HOUR	08:00	09:30	15	✓
D4	2027 YoO DS	PM	ONE HOUR	16:45	18:15	15	✓
D5	2032 YoO+5 DS	AM	ONE HOUR	08:00	09:30	15	✓
D6	2032 YoO+5 DS	PM	ONE HOUR	16:45	18:15	15	✓
D7	2042 YoO+15 DS	AM	ONE HOUR	08:00	09:30	15	✓
D8	2042 YoO+15 DS	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2025, AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					63	95
A-B					0	0
A-C					111	167

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	544	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	587	0.000	0	0.0	0.0	0.000	A
C-A	52	13			52				
A-B	0	0			0				
A-C	91	23			91				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	539	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	583	0.000	0	0.0	0.0	0.000	A
C-A	62	16			62				
A-B	0	0			0				
A-C	109	27			109				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	532	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	577	0.000	0	0.0	0.0	0.000	A
C-A	76	19			76				
A-B	0	0			0				
A-C	133	33			133				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	532	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	577	0.000	0	0.0	0.0	0.000	A
C-A	76	19			76				
A-B	0	0			0				
A-C	133	33			133				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	539	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	583	0.000	0	0.0	0.0	0.000	A
C-A	62	16			62				
A-B	0	0			0				
A-C	109	27			109				

09:15 - 09:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	544	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	587	0.000	0	0.0	0.0	0.000	A
C-A	52	13			52				
A-B	0	0			0				
A-C	91	23			91				

2025, PM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.00	0.00	0.0	A	0	0
C-AB	0.00	0.00	0.0	A	0	0
C-A					77	116
A-B					0	0
A-C					39	58

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	558	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	601	0.000	0	0.0	0.0	0.000	A
C-A	63	16			63				
A-B	0	0			0				
A-C	32	8			32				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	555	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	600	0.000	0	0.0	0.0	0.000	A
C-A	76	19			76				
A-B	0	0			0				
A-C	38	9			38				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	551	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	598	0.000	0	0.0	0.0	0.000	A
C-A	92	23			92				
A-B	0	0			0				
A-C	46	12			46				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	551	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	598	0.000	0	0.0	0.0	0.000	A
C-A	92	23			92				
A-B	0	0			0				
A-C	46	12			46				

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	0	0	555	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	600	0.000	0	0.0	0.0	0.000	A
C-A	76	19			76				
A-B	0	0			0				
A-C	38	9			38				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	0	0	558	0.000	0	0.0	0.0	0.000	A
C-AB	0	0	601	0.000	0	0.0	0.0	0.000	A
C-A	63	16			63				
A-B	0	0			0				
A-C	32	8			32				

2027 YoO DS, AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

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	0.12	7.76	0.1	A	52	78
C-AB	0.02	5.86	0.0	A	9	13
C-A					65	97
A-B					4	7
A-C					119	178

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	43	11	541	0.079	42	0.0	0.1	7.217	A
C-AB	7	2	621	0.012	7	0.0	0.0	5.861	A
C-A	53	13			53				
A-B	4	0.92			4				
A-C	97	24			97				

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	51	13	535	0.095	51	0.1	0.1	7.439	A
C-AB	9	2	624	0.014	9	0.0	0.0	5.851	A
C-A	63	16			63				
A-B	4	1			4				
A-C	116	29			116				

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	62	16	526	0.118	62	0.1	0.1	7.752	A
C-AB	11	3	628	0.017	11	0.0	0.0	5.838	A
C-A	77	19			77				
A-B	5	1			5				
A-C	142	36			142				

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	62	16	526	0.118	62	0.1	0.1	7.755	A
C-AB	11	3	628	0.017	11	0.0	0.0	5.838	A
C-A	77	19			77				
A-B	5	1			5				
A-C	142	36			142				

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	51	13	535	0.095	51	0.1	0.1	7.445	A
C-AB	9	2	624	0.014	9	0.0	0.0	5.854	A
C-A	63	16			63				
A-B	4	1			4				
A-C	116	29			116				

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	43	11	541	0.079	43	0.1	0.1	7.231	A
C-AB	7	2	621	0.012	7	0.0	0.0	5.862	A
C-A	53	13			53				
A-B	4	0.92			4				
A-C	97	24			97				

2027 YoO DS, PM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	7.09	0.1	A	27	41
C-AB	0.05	5.81	0.1	A	26	39
C-A					77	115
A-B					13	19
A-C					50	75

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	6	550	0.041	22	0.0	0.0	6.815	A
C-AB	21	5	640	0.032	20	0.0	0.0	5.805	A
C-A	63	16			63				
A-B	10	3			10				
A-C	41	10			41				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	27	7	546	0.049	27	0.0	0.1	6.930	A
C-AB	25	6	647	0.039	25	0.0	0.0	5.791	A
C-A	75	19			75				
A-B	12	3			12				
A-C	49	12			49				

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	33	8	540	0.060	33	0.1	0.1	7.090	A
C-AB	32	8	655	0.048	32	0.0	0.1	5.771	A
C-A	91	23			91				
A-B	15	4			15				
A-C	60	15			60				

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	33	8	540	0.060	33	0.1	0.1	7.090	A
C-AB	32	8	655	0.048	32	0.1	0.1	5.774	A
C-A	91	23			91				
A-B	15	4			15				
A-C	60	15			60				

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	27	7	546	0.049	27	0.1	0.1	6.934	A
C-AB	25	6	647	0.039	25	0.1	0.1	5.793	A
C-A	75	19			75				
A-B	12	3			12				
A-C	49	12			49				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	6	550	0.041	22	0.1	0.0	6.819	A
C-AB	21	5	640	0.032	21	0.1	0.0	5.808	A
C-A	63	16			63				
A-B	10	3			10				
A-C	41	10			41				

2032 YoO+5 DS, AM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

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	0.12	7.79	0.1	A	51	77
C-AB	0.02	5.86	0.0	A	9	14
C-A					69	103
A-B					5	7
A-C					127	190

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	42	11	539	0.078	42	0.0	0.1	7.240	A
C-AB	7	2	622	0.012	7	0.0	0.0	5.857	A
C-A	57	14			57				
A-B	4	0.94			4				
A-C	104	26			104				

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	50	13	532	0.095	50	0.1	0.1	7.467	A
C-AB	9	2	625	0.015	9	0.0	0.0	5.846	A
C-A	67	17			67				
A-B	4	1			4				
A-C	124	31			124				

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	62	15	524	0.118	62	0.1	0.1	7.791	A
C-AB	11	3	629	0.018	11	0.0	0.0	5.831	A
C-A	82	21			82				
A-B	6	1			6				
A-C	152	38			152				

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	62	15	524	0.118	62	0.1	0.1	7.794	A
C-AB	11	3	629	0.018	11	0.0	0.0	5.831	A
C-A	82	21			82				
A-B	6	1			6				
A-C	152	38			152				

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	50	13	532	0.095	50	0.1	0.1	7.471	A
C-AB	9	2	625	0.015	9	0.0	0.0	5.849	A
C-A	67	17			67				
A-B	4	1			4				
A-C	124	31			124				

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	42	11	539	0.078	42	0.1	0.1	7.251	A
C-AB	7	2	622	0.012	7	0.0	0.0	5.860	A
C-A	57	14			57				
A-B	4	0.94			4				
A-C	104	26			104				

2032 YoO+5 DS, PM

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Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	7.12	0.1	A	28	41
C-AB	0.05	5.79	0.1	A	27	40
C-A					82	123
A-B					13	19
A-C					52	78

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	549	0.041	22	0.0	0.0	6.832	A
C-AB	21	5	643	0.033	21	0.0	0.0	5.786	A
C-A	68	17			68				
A-B	11	3			11				
A-C	43	11			43				

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	27	7	545	0.050	27	0.0	0.1	6.950	A
C-AB	26	6	650	0.040	26	0.0	0.1	5.769	A
C-A	80	20			80				
A-B	13	3			13				
A-C	51	13			51				

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	33	8	539	0.061	33	0.1	0.1	7.117	A
C-AB	33	8	659	0.049	33	0.1	0.1	5.745	A
C-A	97	24			97				
A-B	15	4			15				
A-C	63	16			63				

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	33	8	539	0.061	33	0.1	0.1	7.117	A
C-AB	33	8	659	0.050	33	0.1	0.1	5.746	A
C-A	97	24			97				
A-B	15	4			15				
A-C	63	16			63				

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	27	7	545	0.050	27	0.1	0.1	6.955	A
C-AB	26	6	650	0.040	26	0.1	0.1	5.773	A
C-A	80	20			80				
A-B	13	3			13				
A-C	51	13			51				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	23	6	549	0.041	23	0.1	0.0	6.836	A
C-AB	21	5	643	0.033	21	0.1	0.0	5.792	A
C-A	68	17			68				
A-B	11	3			11				
A-C	43	11			43				

2042 YoO+15 DS, AM

RECEIVED: 18/12/2025

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

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	0.12	7.85	0.1	A	52	78
C-AB	0.02	5.84	0.0	A	9	14
C-A					73	110
A-B					4	7
A-C					134	201

Main Results for each time segment

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	43	11	537	0.079	42	0.0	0.1	7.272	A
C-AB	7	2	623	0.012	7	0.0	0.0	5.843	A
C-A	60	15			60				
A-B	4	0.92			4				
A-C	110	27			110				

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	51	13	530	0.096	51	0.1	0.1	7.509	A
C-AB	9	2	626	0.014	9	0.0	0.0	5.829	A
C-A	72	18			72				
A-B	4	1			4				
A-C	131	33			131				

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	62	16	521	0.120	62	0.1	0.1	7.846	A
C-AB	11	3	631	0.018	11	0.0	0.0	5.811	A
C-A	88	22			88				
A-B	5	1			5				
A-C	161	40			161				

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	62	16	521	0.120	62	0.1	0.1	7.849	A
C-AB	11	3	631	0.018	11	0.0	0.0	5.813	A
C-A	88	22			88				
A-B	5	1			5				
A-C	161	40			161				

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	51	13	530	0.096	51	0.1	0.1	7.515	A
C-AB	9	2	626	0.014	9	0.0	0.0	5.832	A
C-A	72	18			72				
A-B	4	1			4				
A-C	131	33			131				

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	43	11	537	0.079	43	0.1	0.1	7.286	A
C-AB	7	2	623	0.012	7	0.0	0.0	5.843	A
C-A	60	15			60				
A-B	4	0.92			4				
A-C	110	27			110				

2042 YoO+15 DS, PM

RECEIVED: 18/12/2025

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-AC	0.06	7.13	0.1	A	27	41
C-AB	0.05	5.77	0.1	A	26	40
C-A					87	130
A-B					13	19
A-C					55	83

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	6	548	0.041	22	0.0	0.0	6.840	A
C-AB	21	5	645	0.032	21	0.0	0.0	5.762	A
C-A	72	18			72				
A-B	10	3			10				
A-C	45	11			45				

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	27	7	544	0.049	27	0.0	0.1	6.960	A
C-AB	26	6	653	0.039	26	0.0	0.1	5.743	A
C-A	85	21			85				
A-B	12	3			12				
A-C	54	14			54				

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	33	8	537	0.061	33	0.1	0.1	7.130	A
C-AB	32	8	663	0.049	32	0.1	0.1	5.711	A
C-A	103	26			103				
A-B	15	4			15				
A-C	66	17			66				

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	33	8	537	0.061	33	0.1	0.1	7.130	A
C-AB	32	8	663	0.049	32	0.1	0.1	5.713	A
C-A	103	26			103				
A-B	15	4			15				
A-C	66	17			66				

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	27	7	544	0.049	27	0.1	0.1	6.962	A
C-AB	26	6	653	0.039	26	0.1	0.1	5.743	A
C-A	85	21			85				
A-B	12	3			12				
A-C	54	14			54				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-AC	22	6	548	0.041	22	0.1	0.0	6.844	A
C-AB	21	5	645	0.032	21	0.1	0.0	5.768	A
C-A	72	18			72				
A-B	10	3			10				
A-C	45	11			45				

APPENDIX G: ARCHAEOLOGY AND CULTURAL HERITAGE

SMR/RMP Sites within the Study Area

Legislation Protecting the Archaeological Resource

Legislation Protecting the Architectural Heritage Resource

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14.1 APPENDIX 14.1 SMR/RMP SITES WITHIN THE STUDY AREA

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SMR NO.	DU001-004
RMP STATUS	Yes
TOWNLAND	Flemingtown
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	718181, 764328
CLASSIFICATION	Ritual site - holy well
DIST. FROM DEVELOPMENT	To the immediate north
DESCRIPTION	Natural spring well situated in an area of rock outcrop adjacent to farm buildings. Enclosed by a recently constructed ditch and bank which was built to keep farm animals out. Annotated 'Lady Well' on all editions of the OSi historic maps. Described by Ó Danachair (1958, 72) as a 'small pool c. 5' x 3', between 2 flat rock in the corner of a small garden, with a good spring. No devotions now, but known as a holy well'. Lady Well described in 1974 by Henry A. Wheeler as a small pool with concrete dam, apparently used for watering animals' (SMR File 14/05/1974). Comprises a roughly circular, water filled depression into which modern field drains empty. It was once a large structure and water was channeled through the rock into a small stream (Skyvova, 2005, 51). The site has been used as a dumping ground of recent years. Geophysical prospecting within the field immediately to the east of the holy well picked up natural and ferrous anomalies but no definite archaeological sites (Nicholls & Shiel, 2005).
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	DU001-022001
RMP STATUS	Yes
TOWNLAND	Flemingtown
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	718202, 764336
CLASSIFICATION	Excavation
DIST. FROM DEVELOPMENT	Within the site

DESCRIPTION	Geophysical survey (licence no. 05R0137) identified a series of anomalies (Nicholls and Shiel 2005) that suggested the presence of potential archaeological features. Test excavation (Licence no. 07E0057) confirmed the presence of a dense pit cluster interspersed with a series of linear features and curving ditches within an area measuring 45m by 50. A piece of struck flint was recovered from a linear feature suggesting a prehistoric date (Elliot 2007, 285).
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	DU001-022002
RMP STATUS	Yes
TOWNLAND	Flemingtown
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	718219, 764306
CLASSIFICATION	Pit
DIST. FROM DEVELOPMENT	Within the site
DESCRIPTION	Geophysical survey (licence no. 05R0137) identified a series of anomalies that suggested the presence of potential archaeological features. Test excavation confirmed the presence of a pit cluster that consisted of at least six pits, circular in plan (average 0.30m diam.) with similar charcoal rich fills with burnt bone inclusions (Elliot 2007, 286).
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	DU001-023
RMP STATUS	Yes
TOWNLAND	Flemingtown
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	718186, 764158
CLASSIFICATION	Field system
DIST. FROM DEVELOPMENT	Within the site
DESCRIPTION	Geophysical survey (Licence 05R137; Nicholls and Shiel, 2005) identified strong linear and rectilinear responses that suggest a large complex at the interior of which are numerous internal divisions, pit-type responses and possible industrial activity.

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	Possibly a continuation of early medieval activity excavated immediately to the south (DU001-015----).
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	DU001-026
RMP STATUS	Yes
TOWNLAND	Flemingtown
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	718116, 764054
CLASSIFICATION	Excavation - miscellaneous
DIST. FROM DEVELOPMENT	Within the site
DESCRIPTION	Geophysical survey (licence no. 05R0137) identified a series of anomalies thought to represent a series of conjoined enclosures with several large pit-type anomalies (Nicholls and Shiel 2005). Test excavation (licence no. 07E0057) confirmed the presence of a cluster of pits and possible structural features within an area 30m x60m under redeposited natural. Burnt and charcoal fills were predominant (Elliot 2007, 292)
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	DU001-033
RMP STATUS	Yes
TOWNLAND	Flemingtown
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	717837, 764114
CLASSIFICATION	Enclosure
DIST. FROM DEVELOPMENT	Within the site
DESCRIPTION	Located at the SE corner of a large arable field is the southern half of a circular enclosure, one of a number of cropmark enclosures W of Balbriggan. It is clearly visible on Google Earth imagery (24 June 2018). Site bisected by later field boundary with enclosure most clearly visible in arable field to S. It comprises an circular enclosure (ext. diam. c. 35.4m) defined to the S by a ditch (Wth c. 1.3m). Other linear and curvilinear cropmarks to the E and W may be associated with the enclosure.

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REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	DU001-028
RMP STATUS	Yes
TOWNLAND	Clonard or Folkstown Great
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	718256, 763766
CLASSIFICATION	Excavation - miscellaneous
DIST. FROM DEVELOPMENT	c. 14m south
DESCRIPTION	Test excavation (licence no. 07E0057) identified a V-shaped linear feature orientated north-west/south-east (Elliot 2007, 295). A flint blade was recovered from the fill suggesting a prehistoric date. In the field to the north east is a Neolithic house (DU001-014----).
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	DU001-015-017
RMP STATUS	Yes
TOWNLAND	Flemingtown
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	718227, 764112
CLASSIFICATION	Enclosure/ Industrial site/ Kiln - corn-drying
DIST. FROM DEVELOPMENT	c. 32m east
DESCRIPTION	Pre-development investigations in 2005 revealed a multiple-ditched enclosure. There was no indication of a habitation area within the excavated portion of the site and only very limited evidence for structures. One of the ditches produced a calibrated radiocarbon date of AD 1002-1013 (Bolger, T 2009, 27-29). Pre-development investigations in 2005 revealed evidence for metalworking in the form of bowl furnaces with associated pits. A large quantity of ferric slag was retrieved from the site (Bolger 2009, 32, Fig.10).

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	Pre-development investigations in 2005 revealed a cluster of kilns including one keyhole-shaped feature with a perfectly circular chamber (Diam.2.60m, D 0.05m-0.24m) and a flue or passage which exited the chamber on the W. The upper stone of a rotary quern was also uncovered (Bolger 2009, 32-33).
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	DU001-024
RMP STATUS	Yes
TOWNLAND	Flemingtown
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	718235, 764031
CLASSIFICATION	Enclosure
DIST. FROM DEVELOPMENT	c. 32m east
DESCRIPTION	Geophysical survey (licence no. 050R137) identified a series of anomalies (Nicholls and Shiel 2005). Test excavation (licence no. 07E0057) confirmed the presence of a series of ditches (average 0.30m deep) that form a sub-square enclosure (Elliot 2007, 288).
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	DU001-014
RMP STATUS	Yes
TOWNLAND	Flemingtown
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	718259, 763937
CLASSIFICATION	House - Neolithic
DIST. FROM DEVELOPMENT	c. 36m east
DESCRIPTION	Pre-development investigations in 2005 identified evidence dating from the Neolithic through to the early medieval period. The earliest activity at the site dates from the Neolithic. It comprises a Neolithic house, oriented roughly N-S (L 10m, Wth 6m). The footprint of the building was wholly defined by a slot trench, suggesting that the structure was plank built with evidence for a doorway on the W side. A substantial assemblage of early Neolithic pottery and struck flint were retrieved from the slot

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	trench. This produced a radiocarbon date of 3394-3387 cal. BC (Bolger, T.2009, 25-26).
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	DU001-032
RMP STATUS	Yes
TOWNLAND	Flemingtown
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	717697, 763888
CLASSIFICATION	Ring-ditch
DIST. FROM DEVELOPMENT	c. 39m southwest
DESCRIPTION	Located at the SE corner of a large arable field. The ring-ditch, one of a number of cropmark sites W of Balbriggan, is clearly visible on Apple Maps (June 2018). Site comprises a circular ring-ditch (ext. diam. c. 13m) defined by a ditch (Wth c. 2m), where visible.
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	DU001-027
RMP STATUS	Scheduled for inclusion
TOWNLAND	Clonard or Folkstown Great
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	718055 763509
CLASSIFICATION	Enclosure
DIST. FROM DEVELOPMENT	Within the site
DESCRIPTION	Geophysical survey (licence no. 05R0137) identified the remains of a circular enclosure, of probable stone origin, measuring approximately 30m in diameter (Nicholls and Shiel 2005, 9).
REFERENCE	www.archaeology.ie/ SMR file

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SMR NO.	DU001-029
RMP STATUS	Scheduled for inclusion
TOWNLAND	Balrothery
PARISH	Balrothery East
BARONY	Clonard or Folkstown Great
I.T.M.	718270 763576
CLASSIFICATION	Pit
DIST. FROM DEVELOPMENT	c. 66m south
DESCRIPTION	Test excavation (licence no. 07E0057) identified a large circular pit with charcoal rich fill. A flint blade was recovered from the fill suggesting prehistoric date for the feature (Elliot 2007, 297).
REFERENCE	www.archaeology.ie/ SMR file

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SMR NO.	DU001-025
RMP STATUS	Scheduled for inclusion
TOWNLAND	Flemingtown
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	717964 763917
CLASSIFICATION	Enclosure
DIST. FROM DEVELOPMENT	c. 80m west (incorrectly plotted on SMR map)
DESCRIPTION	Geophysical survey (licence no. 050R137) identified a series of anomalies thought to represent a series of conjoined enclosures with several large pit-type anomalies (Nicholls and Shiel 2005). Test excavation (licence no. 07E0057) confirmed the presence of a cluster of pits and related linear and curvilinear features. Fill of features consisted of charcoal rich soil, some with burnt bone inclusions (Elliot 2007, 291).
REFERENCE	www.archaeology.ie/ SMR file

SMR NO.	DU002-021
RMP STATUS	Scheduled for inclusion
TOWNLAND	Flemingtown

PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	718640 763567
CLASSIFICATION	Burnt spread
DIST. FROM DEVELOPMENT	c. 231m north (incorrectly plotted on SMR map)
DESCRIPTION	Test excavation (Licence no. 07E0057) identified a burnt spread (7m by 10m) within a natural basin (Elliot 2007, 305).
REFERENCE	www.archaeology.ie/ SMR file

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SMR NO.	DU005-117
RMP STATUS	Yes
TOWNLAND	Clogheder
PARISH	Balrothery
BARONY	Balrothery East
I.T.M.	719070, 763303
CLASSIFICATION	Excavation - miscellaneous
DIST. FROM DEVELOPMENT	c. 243m east
DESCRIPTION	Excavated in advance of road construction (Licence no. 08E0106) the remains consisted of a ditch (0.7m width) that extended for 32m NE-SW. A pit was associated with the ditch. Both contained charcoal rich fills with heat-cracked stones and were interpreted as Bronze Age in date (Clarke and Linnane 2008, 5)
REFERENCE	www.archaeology.ie/ SMR file

14.2 APPENDIX 14.2 LEGISLATION PROTECTING THE ARCHAEOLOGICAL RESOURCE

14.2.1 Protection of Cultural Heritage

The cultural heritage in Ireland is safeguarded through national and international policy designed to secure the protection of the cultural heritage resource to the fullest possible extent (Department of Arts, Heritage, Gaeltacht and the Islands 1999, p.35). This is undertaken in accordance with the provisions of the European Convention on the Protection of the Archaeological Heritage (Valletta Convention), ratified by Ireland in 1997.

14.2.2 The Archaeological Resource

The National Monuments Act 1930 to 2014 and relevant provisions of the National Cultural Institutions Act 1997 are the primary means of ensuring the satisfactory protection of archaeological remains, which includes all man-made structures of whatever form or date except buildings habitually used for ecclesiastical purposes. A National Monument is described as 'a monument or the remains of a monument the preservation of which is a matter of national importance by reason of the historical, architectural, traditional, artistic or archaeological interest attaching thereto' (National Monuments Act 1930 Section 2). A number of mechanisms under the National Monuments Act are applied to secure the protection of archaeological monuments. These include the Register of Historic Monuments, the Record of Monuments and Places, and the placing of Preservation Orders and Temporary Preservation Orders on endangered sites.

The National Monuments Act 1930, as amended by various acts including but not limited to, the National Monuments (Amendment) Act 1954, the National Monuments (Amendment) Act 1987, the National Monuments (Amendment) Act 1994 and the National Monuments (Amendment) Act 2004 (together the National Monuments Acts) make provision for the protection and preservation of national monuments, archaeological monuments and archaeological objects in Ireland. The description of the existing environment in this chapter takes account of those statutory designations and the chapter takes account of the legislative monitoring and licencing requirements as mitigation.

The Historic and Archaeological Heritage and Miscellaneous Provisions Act 2023 (the 2023 Act) was enacted by the Oireachtas in late 2023 and aims to address a range of structural issues, simplify terminology, as well as provide a single accessible piece of legislation. At the date of writing many sections of the 2023 Act have yet to commence. It is not anticipated that this will result in statutory protection being extended to any potential receptors apart from those already considered in the Cultural Heritage chapter and the chapter already identifies as mitigation the various archaeological investigations and licencing requirements that will come into force when the 2023 Act is commenced. Accordingly, the EIAR conclusions are likely to be unchanged should the 2023 Act commence fully while the application is moving through the planning process.

14.2.3 Ownership and Guardianship of National Monuments

The Minister may acquire national monuments by agreement or by compulsory order. The state or local authority may assume guardianship of any national monument (other than dwellings). The owners of national monuments (other than dwellings) may also appoint the Minister or the local authority as guardian of that monument if the state or local authority agrees. Once the site is in ownership or guardianship of the state, it may not be interfered with without the written consent of the Minister.

14.2.4 Register of Historic Monuments

Section 5 of the 1987 Act requires the Minister to establish and maintain a Register of Historic Monuments. Historic monuments and archaeological areas present on the register are afforded statutory protection under the 1987 Act. Any interference with sites recorded on the register is illegal without the permission of the Minister. Two months' notice in writing is required prior to any work being undertaken on or in the

vicinity of a registered monument. The register also includes sites under Preservation Orders and Temporary Preservation Orders. All registered monuments are included in the Record of Monuments and Places.

14.2.5 Preservation Orders and Temporary Preservation Orders

Sites deemed to be in danger of injury or destruction can be allocated Preservation Orders under the 1930 Act. Preservation Orders make any interference with the site illegal. Temporary Preservation Orders can be attached under the 1954 Act. These perform the same function as a Preservation Order but have a time limit of six months, after which the situation must be reviewed. Work may only be undertaken on or in the vicinity of sites under Preservation Orders with the written consent, and at the discretion, of the Minister.

14.2.6 Record of Monuments and Places

Section 12(1) of the 1994 Act requires the Minister for Arts, Heritage, Gaeltacht and the Islands (now the Minister for the Arts, Heritage, Regional, Rural and Gaeltacht Affairs) to establish and maintain a record of monuments and places where the Minister believes that such monuments exist. The record comprises a list of monuments and relevant places and a map/s showing each monument and relevant place in respect of each county in the state. All sites recorded on the Record of Monuments and Places receive statutory protection under the National Monuments Act 1994.

Section 12(3) of the 1994 Act provides that 'where the owner or occupier (other than the Minister for Arts, Heritage, Gaeltacht and the Islands) of a monument or place included in the Record, or any other person, proposes to carry out, or to cause or permit the carrying out of, any work at or in relation to such a monument or place, he or she shall give notice in writing to the Minister of Arts, Heritage, Gaeltacht and the Islands to carry out work and shall not, except in the case of urgent necessity and with the consent of the Minister, commence the work until two months after the giving of notice'.

Under the National Monuments (Amendment) Act 2004, anyone who demolishes or in any way interferes with a recorded site is liable to a fine not exceeding €3,000 or imprisonment for up to six months. On summary conviction and on conviction of indictment, a fine not exceeding €10,000 or imprisonment for up to five years is the penalty. In addition they are liable for costs for the repair of the damage caused. In addition to this, under the European Communities (Environmental Impact Assessment) Regulations 1989, Environmental Impact Assessment Reports (EIAR) are required for various classes and sizes of development project to assess the impact development will have on the existing environment, which includes the cultural, archaeological and built heritage resources. These document's recommendations are typically incorporated into the conditions under which the development must proceed and thus offer an additional layer of protection for monuments which have not been listed on the RMP.

14.2.7 The Planning and Development Act 2024

Under planning legislation, each local authority is obliged to draw up a Development Plan setting out their aims and policies with regard to the growth of the area over a five-year period. They cover a range of issues including archaeology and built heritage, setting out their policies and objectives with regard to the protection and enhancement of both. These policies can vary from county to county. The Planning and Development Act 2024 recognises that proper planning and sustainable development includes the protection of the archaeological heritage. Conditions relating to archaeology may be attached to individual planning permissions.

14.2.7.1 Fingal County Development Plan (2023–2029)

Archaeology is a non-renewable resource in that once an archaeological feature or site is excavated or removed it is gone forever from the landscape. Therefore, any potential development should consider the

potential impact on archaeology in the very earliest stages and seek to avoid affecting archaeological features or sites and their setting. This includes development along or in Fingal's rivers, coastline, and tidal estuaries. Currently 40% of the recorded archaeological sites within Fingal are sub surface. Therefore, any development has the potential to uncover previously unknown archaeological sites.

Statement of Policy:

The Council is committed to the protection and conservation of buildings, areas, structures, sites, and features of archaeological, architectural, historical, artistic, cultural, scientific, social, or technical interest:

By safeguarding archaeological sites, monuments, objects, and their settings listed in the Record of Monuments and Places (RMP), and any additional newly discovered archaeological remains, and by identifying archaeologically sensitive historic landscapes.

By protecting the architectural heritage of Fingal through the identification of Protected Structures, the designation of Architectural Conservation Areas (ACAs), the safeguarding of designed landscapes and historic gardens, and the recognition of structures and elements that contribute positively to the vernacular and industrial heritage of the County.

By favouring the preservation in-situ (or at a minimum preservation by record) of all sites and features of historical and archaeological interest.

By making our cultural heritage more accessible and maximise its potential as a learning resource.

By promoting the understanding of Fingal's cultural heritage in terms of its inherent and unique character and to recognise what elements should be preserved, conserved, or enhanced.

By implementing the objectives and actions of the Fingal Heritage Plan to raise the profile and awareness of Fingal's heritage.

The Council is dedicated to protecting, conserving, and presenting the County's rich cultural heritage while promoting sustainable economic development and the enrichment of the environment.

Objective CH02:

Favour the preservation in situ or at a minimum preservation by record, of archaeological sites, monuments, features, or objects in their settings. In securing such preservation the Council will have regard to the advice and recommendations of the National Monuments Service of the Department of the Arts, Heritage, Regional, Rural and Gaeltacht Affairs.

Objective CH03:

Protect all archaeological sites and monuments, underwater archaeology, and archaeological objects, which are listed in the Record of Monuments and Places and all sites and features of archaeological and historic interest discovered subsequent to the publication of the Record of Monuments and Places, and to seek their preservation in situ (or at a minimum, preservation by record) through the planning process.

Objective CH04:

Encourage and promote the appropriate management and maintenance of the County's archaeological heritage, including historical burial grounds, in accordance with conservation principles and best practice guidelines.

Objective CH05:

Ensure archaeological remains are identified and fully considered at the very earliest stages of the development process, that schemes are designed to avoid impacting on the archaeological heritage.

Objective CH06:

Require that proposals for linear development over one kilometre in length; proposals for development involving ground clearance of more than half a hectare; or developments in proximity to areas with a density of known archaeological monuments and history of discovery; to include an Archaeological Impact Assessment and refer such applications to the relevant Prescribed Bodies.

Objective CH07:

Ensure that development within the vicinity of a Recorded Monument or Zone of Archaeological Notification does not seriously detract from the setting of the feature and is sited and designed appropriately.

Objective CH09:

Recognise the importance of archaeology or historic landscapes and the connectivity between sites, where it exists, in order to safeguard them from developments that would unduly sever or disrupt the relationship and/or inter-visibility between sites.

Objective CH12:

Promote best practice for archaeological excavation by ensuring that they are undertaken according to best practice as outlined by the National Monuments Service, Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs, The National Museum, and the Institute of Archaeologists of Ireland.

Objective CH13:

Actively support the dissemination of the findings of archaeological investigations and excavations through the publication of excavation reports thereby promoting public awareness and appreciation of the value of archaeological resources.

Objective CH14:

Identify Zones of Archaeological Notification that contain clusters of Recorded Monuments or have a significant history of the discovery of archaeological sites, features, and objects in order to allow for their designation, protection of their setting and environs.

Objective CH15:

Raise public awareness of the cultural heritage and improve legibility by providing appropriate signage or interpretation in areas, sites, villages, and buildings of archaeological and historic significance.

Objective CH16:

Develop and implement the findings of the Community Archaeology Strategy for Fingal.

Objective CH17:

Support the growth of cultural tourism in the County, including the potential for niche heritage-based tourism products by facilitating the development of heritage events, infrastructure such as heritage trails, walkways, and cycleways etc. and activities such as community excavation.

Objective CH18:

Manage the archaeological sites and monuments that Fingal County Council owns or is responsible for according to best practice and according to Conservation Plans where they exist.

14.3 APPENDIX 14.3 LEGISLATION PROTECTING THE ARCHITECTURAL HERITAGE RESOURCE

The main laws protecting built heritage are the Architectural Heritage (National Inventory) and National Monuments (Miscellaneous Provisions) Act 1999 and the Planning and Development Act, 2024. The Architectural Heritage Act requires the Minister to establish a survey to identify, record and assess the architectural heritage of the country. The background to this legislation derives from Article 2 of the 1985 Convention for the Protection of Architectural Heritage (Granada Convention). This states that for the purpose of precise identification of the monuments, groups of structures and sites to be protected, each member state will undertake to maintain inventories of that architectural heritage.

The National Inventory of Architectural Heritage (NIAH) was established in 1990 to fulfil Ireland's obligation under the Granada Convention, through the establishment and maintenance of a central record, documenting and evaluating the architecture of Ireland (NIAH 2024, page 3). As inclusion in the inventory does not provide statutory protection, the survey information is used in conjunction with the Architectural Heritage Protection Guidelines for Planning Authorities to advise local authorities on compilation of a Record of Protected Structures as required by the Planning and Development Act, 2024.

14.3.1 Protection under the Record of Protected Structures and County Development Plan

Structures of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest can be protected under the Planning and Development Act, 2024.

The Act states that 'A planning authority shall prepare and maintain a record of every structure, part of a structure and specified feature within the attendant grounds of a structure within its functional area that, in the opinion of the planning authority, forms part of the architectural heritage of the area and is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest'.

At any time after preparing a record of protected structures under section 306, a planning authority may (a) add a structure, a specified part of a structure or a specified feature within the attendant grounds of a structure to the record of protected structures where the authority considers the structure, the part, or the feature, as the case may be, to be of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or value (b) delete a structure, a specified part of a structure or a specified feature within the attendant grounds of a structure from the record of protected structures where the authority considers that the protection of the structure, part or feature, as the case may be, is no longer warranted.

14.3.2 Architectural Interest

The characteristics of architectural interest may be attributed to a structure or part of a structure with such qualities as the following:

- A generally agreed exemplar of good quality architectural design
- The work of a known and distinguished architect, designer or engineer;
- An exemplar of a building type, plan form, style or styles of any period but also the harmonious interrelationship of differing styles within one structure;
- A structure which makes a positive contribution to its setting, such as a group of structures or a streetscape in an urban area, or the landscape in a rural area;
- A structure with an interior that is well designed, rich in decoration, complex or spatially pleasing.

14.3.3 Historical Interest

- The notion of historical interest underpins a general belief that it is worthwhile to conserve and preserve information, sites and structures from past centuries. The level of importance of the historical connection and its relationship to the existing fabric of the structure should be assessed. The historical interest relating to a structure or parts of a structure may be identified in various ways.:

- A structure may have historical interest as the location of an important event that occurred in or is associated with it. It may have historical interest in its association with a historic personality. Some associations or events may be so important that the structure retains its significance regardless of subsequent alteration;
- A structure may have influenced, or been influenced by, a historic figure. Important people may have lived in the structure or have been otherwise associated with it, e.g. its architect, builder or patron. Places in which evidence of an association with a person survive in situ, or in which the settings are substantially intact, are of greater significance than those which are much changed or in which much evidence does not survive;
- Historical interest can be attributed where light is thrown on the character of a past age by virtue of the structure's design, location, materials or original use;
- A structure may be a memorial to a past event;
- A structure itself may be an example of the effects of change over time. The design and fabric of the structure may contain evidence of its former use or symbolic meaning. This may be the case with former churches or gaols that have since changed and, in so doing, illustrate a historic development;
- Some features and fixtures may survive, e.g. in consistory courts and courts of law, that are important evidence of former legal or liturgical practice and may have special historical interest for that reason;
- Some unusual structures may have historical or socio-historical interest, e.g. early electricity substations, "Emergency"-era lookout posts or sentry boxes. Although not yet of popular heritage significance, such structures can nonetheless have special historical and social interest;
- Special historical interest may exist because of the rarity of a structure. Either few structures of an identifiable type were built at a particular time or few have survived. In either case, the extant structure may be one of the few representative examples of its time that still exists in a local, regional or national context. The rarity of surviving examples of a building type can ensure that special historical interest accrues to them.

14.3.4 Technical Interest

Technical interest in a structure relates to the art of the structural engineer in devising solutions to problems of spanning space and weatherproofing enclosures. It may be found in structures which are important examples of innovative, unusual or virtuoso engineering design or use of materials. A structure may be of technical interest for one or more of the following reasons:

- It displays engineering or structural innovation in its construction or design such as the use of cast- or wrought iron prefabrication or the early use of concrete;
- It is the work of a distinguished engineer;
- It is an exemplar of the engineering design practice of its time. For example, a bridge may be a masonry arch, an iron suspension or a concrete span;
- It displays technically innovative or unusual construction materials, such as early examples of Coade stone, cement plank cladding or glazed curtain walling;
- It contains innovative mechanical fixtures, machinery or plant or industrial heritage artefacts that describe the character of production processes. The specifically industrial aspect of some sites like mills, mill ponds or mines can often have a technical interest;
- Technical interest can be ascribed to the innovative engineering qualities of structure, as distinct from the building's appropriateness for use or its appearance.

14.3.5 Cultural Interest

The characteristic of cultural interest permeates architectural heritage and can, in the broadest terms, include aesthetic, economic, historic, scientific or social values of past and present generations. Special cultural interest apply to:

- Those structures to which the Granada Convention refers as 'more modest works
- of the past that have acquired cultural significance with the passing of time';
- Structures that have cinematic or literary associations;
- Other structures that illustrate the development of society, such as early libraries, print works, schoolhouses or swimming baths.

14.3.6 Scientific Interest

The scientific interest, or research value, of a structure will depend on the importance of the data involved and on its quality and/or rarity. Its scientific interest should also be assessed as to how well it represents the area of research in question and the degree to which the structure may contribute further objective information. For example:

- The results of scientific research may be seen in the execution of the structure;
- The materials used in the structure may have the potential to contribute to scientific research, e.g. extinct plant or pollen species preserved in the base layers of ancient thatch roofs;
- The structure may be associated with scientific research that has left its mark on the place, e.g. early Ordnance Survey benchmarks carved into stone work.

14.3.7 Social Interest

The characteristic of social interest embraces those qualities for which a structure, a complex or an area has become a focus of political, spiritual, symbolic or other sentiment to any group of people. A community may have an attachment to a place because it is an essential reference point for that community's identity, whether as a meeting place or a place of ceremony, ritual or tradition. The configuration, disposition or layout of a space or group of structures, where they facilitate behaviour that would otherwise be difficult or impossible, may be of social interest. For example:

- The features and fixtures that testify to community involvement in the creation of a structure, or have a spatial form or layout indicating community involvement in the use of a structure, could include such elements as memorials, stained glass or statues;
- A structure may display vernacular traditions of construction and may be in a group or setting which illustrates the social organisation of the inhabitants. Most obviously this would include thatched houses. In vernacular buildings, elements of the plan form – direct entry, lobby entry, opposing doors, outshots, etc. – and/or the roofing material may be distinctive and have special social interest;
- Types of decoration may have social as well as artistic interest, such as shell houses or the local manifestation of exuberant or astylar stucco decoration where it is particular to a region or town;
- A social interest could also be attributed to structures illustrating the social philosophy of a past age, as in the case of philanthropic and social housing developments. Structures which illustrate a particular lifestyle or social condition, e.g. holy wells, are to be found in many parts of the country.

14.3.8 Artistic Interest

Special artistic interest may be attributed to a structure itself, or to a part of a structure, for its craftsmanship, decoration or design. Examples could include:

- Decoratively carved sculpture or statuary that is part of an architectural composition;
- Ceramic, faience or mosaic tiled or decoratively carved timber shopfronts;
- Fittings and fixtures including chimneypieces, chandeliers or sconces, staircases and wainscoting;
- Decorative plasterwork ceilings;
- Religious art in a place of worship including stained glass or Stations of the Cross;
- Funerary monuments within a graveyard;
- Decorative cast- or wrought iron gates or railings;
- The relationship of materials to each other, and to the totality of the building in which they are situated, if these have been designed as an ensemble.

14.3.9 Archaeological Interest

Archaeological interest is essentially defined by the degree to which material remains can contribute to our understanding of any period or set of social conditions in the past. Structures can have the characteristics of both architectural and archaeological interest as these are not mutually exclusive. The standing walls of a sixteenth-century tower house will have both characteristics of interest. The party walls or basements of houses of late appearance may contain medieval fabric and reveal information of archaeological interest. Fragments of early fabric, including carved or worked stone, may have been reused in later buildings giving these structures archaeological interest. A complex of industrial buildings

may have archaeological interest because of its potential to reveal artefacts and information about the evolution of industry that may be useful to archaeologists, historians and the general public.
(From the NIAH Handbook 2024, 15-17)

The Local Authority has the power to order conservation and restoration works to be undertaken by the owner of the protected structure if it considers the building to be in need of repair. Similarly, an owner or developer must make a written request to the Local Authority to carry out any works on a protected structure and its environs, which will be reviewed within three months of application. Failure to do so may result in prosecution.

APPENDIX H: BIODIVERSITY

Bat Fauna Impact Assessment

4.1A – Bat Lighting Letter

4.2 – Breeding Bird Assessment

4.3 – Wintering Bird Assessment (Winter 2024/2025)

4.3A - I-WeBS Trends for Skerries Coast (site code OU904).

4.3B - I-WeBS Trends for Nanny Estuary & Shore (site code OV401).

4.3C - I-WeBS National Trends of relevant species recorded in this report.

4.3D - I-WeBS Skerries Coast (site code OU904) trends of relevant species recorded in this report.

4.3E - I-WeBS Nanny Shore & Estuary (site code OV401) trends of relevant species recorded in this report

4.4 – Ornithological Survey of Lands at Flemington Lane, Balbriggan, Co. Dublin

4.5 – Ornithological Survey of Lands at Flemington Lane, Balbriggan, Co. Dublin (Winter 2023/2024)

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Bat Fauna Impact Assessment for a proposed development at Flemingington South, Balbriggan, Co. Dublin



16th December 2025

Prepared by: Bryan Deegan (MCIEEM) of Altemar Ltd.

On behalf of: Glenveagh Homes Ltd.

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Directors: Bryan Deegan and Sara Corcoran

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SUMMARY

Structure:	A single derelict bungalow is located at the north end of the site. A metal shed is also located on site.
Location:	A site located at Balbriggan, Co. Dublin.
Bat species present:	Common pipistrelle (<i>Pipistrellus pipistrellus</i>), soprano pipistrelle (<i>Pipistrellus pygmaeus</i>), and Leislers bat (<i>Nyctalus leisleri</i>).
Proposed work:	Residential Development.
Impact on bats:	The survey found no evidence of roosting bats on site. The proposed development will not result in the loss of any bat roost as there are no confirmed bat roosts onsite. The proposed development will change the local environment as demolition works are proposed and new structures are to be erected. Lighting in the residential development has been designed to comply with bat lighting guidelines. Compensatory hedgerows will be planted. Foraging would be expected to continue on site. The proposed development will not impact on flightlines. Mitigation measures are proposed. The overall impact following the implementation of mitigation be a <u>Minor adverse / International / Negative Impact / Not significant / long term impact</u> .
Surveys by:	Bryan Deegan MCIEEM, Frank Spellman (MSc), & Jack Doyle (MSc)
Survey date:	20 th April 2021, 08 th June 2023, 13 th June 2023, 27 th June 2023, 22 nd May 2025, & 14 th August 2025.

Competency of Assessor

This report has been prepared by Bryan Deegan MSc, BSc (MCIEEM). Bryan has over 30 years of experience providing ecological consultancy services in Ireland. He has extensive experience in carrying out a wide range of bat surveys including dusk emergence, dawn re-entry and static detector surveys. He also has extensive experience reducing the potential impact of projects that involve external lighting on Bats. Bryan trained with Conor Kelleher author of the Bat Mitigation Guidelines for Ireland (Kelleher and Marnell (2022)) and Bryan has provided bat ecology (impact assessment and enhancement) services to Dun Laoghaire Rathdown County Council primarily on the Shanganagh Park Masterplan. The desk and field surveys were carried out having regard to the guidance: Bat Surveys for Professional Ecologists – Good Practice Guidelines 3rd Edition (Collins, J. (Ed.) 2016) and Marnell, Kelleher and Mullen (2022), Bat Mitigation Guidelines for Ireland V2 (which update and replace the Bat Mitigation Guidelines for Ireland published in 2006).

Frank Spellman (MSc Zoology, BSc Zoology) has extensive experience in carrying out a wide range of fauna surveys as both a sub-contractor and employee for environmental consultancies and organisations in Ireland and the US. These include both roving and static acoustic bat surveys, terrestrial non-avian mammal surveys, breeding/wintering bird surveys, freshwater ecology surveys as well as flora/invasive plant surveys. Frank has been lead surveyor on numerous development projects within Ireland carrying out full avian/non-avian mammal, wintering bird and breeding bird assessments.

Jack Doyle (MSc Sustainable Environments) has carried out a wide range of flora and fauna surveys and produced ecological assessments on numerous residential, commercial, and infrastructure projects in Ireland. These include breeding ornithological surveys, roving and static acoustic bat surveys, terrestrial non-avian mammal surveys, and habitat identification.

Legislative Context

Wildlife Act 1976 (as amended by, inter alia, the Wildlife (Amendment) Act 2000).

Bats in Ireland are protected by the Wildlife (Amendment) Act 2000. Based on this legislation it is an offence to wilfully interfere with or destroy the breeding or resting place of any species of bat. Under this legislation it is an offence to “*Intentionally kill, injure or take a bat, possess or control any live or dead specimen or anything derived from a bat, wilfully interfere with any structure or place used for breeding or resting by a bat, wilfully interfere with a bat while it is occupying a structure or place which it uses for that purpose.*”

Habitats Directive- Council Directive 92/43/EEC 1992 on the conservation of natural habitats and of wild fauna and flora has been transposed into Irish Law, including, via, *inter alia*, the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended). See Art.73 of the 2011 Regulations which revokes the 1997 Regulations.

Annex II of the Council Directive 92/43/EEC 1992 on the conservation of natural habitats and of wild fauna and flora (EC Habitats Directive) lists animal and plant species of Community interest, the conservation of which requires the designation of Special Areas of Conservation (SACs); Annex IV lists animal and plant species of Community interest in need of strict protection. All bat species in Ireland are listed on Annex IV of the Directive, while the Lesser Horseshoe Bat (*Rhinolophus hipposideros*) is protected under Annex II which related to the designation of Special Areas of Conservation for a species.

Under the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended), all bat species are listed under the First Schedule and, pursuant to, *inter alia*, Part 6 and Regulation 51, it is an offence to:

- Deliberately capture or kill a bat;
- Deliberately disturb a bat particularly during the period of breeding, hibernating or migrating;
- Damage or destroy a breeding site or resting place of a bat;
- Keep, sell, transport, exchange, offer for sale or offer for exchange any bat taken in the wild.

Project Description

The development will consist of the construction of 815 no. dwellings (610 no. houses, 194 apartments & 11 no. later living dwellings), a portion of the C-Ring Road, open space, community building/retail floorspace and 2 no. creches as follows:

- A) Demolition of existing single storey dwelling (c. 154 sq. m) and agricultural outbuilding (c. 366 sq. m) located to the south of Flemington Lane;
- B) Provision of portion of '*C-Ring Road*' from Flemington Lane [to include junctions and ancillary footpaths, cycle paths, lighting, bus stops, boundary wall to adjoining owner, and tie in to existing roads/agricultural access points] to link into the existing R122 roundabout with vehicular access also from the Boulevard Road, Hamlet Lane, & Flemington Lane along with associated amendments to the layout of the Local Road L1130 (also known as the Clonard Road including the creation of a cul de sac arrangement to the south of the C-Ring Road); the provision of car parking spaces (1,037 no.), bicycle parking spaces (1,144 no.) and all internal roads and footpaths and bicycle and bin stores, & substations;
- C) Provision of a community pavilion (2 storeys) comprising community floorspace of c. 730 sq. m (with flexible internal spaces) along with a retail unit (c. 419 sq. m) at ground floor of apartment Block F as well as 2 no. 2 storey creches c. 530 sq. m each with ancillary parking and open space areas;
- D) 610 no. terraced, semi-detached & detached houses comprising 318 no. 2-bedroom houses (2 storey), 254 no. 3-bedroom houses (2 storey) and 38 no. 4-bedroom houses [house types B1/F4/F5 with variants] 3 storeys;
- E) 194 no. apartments in 5 no. apartment buildings (52 no. studio apartments, 87 no. 1 bedroom apartments, 51 no. 2 bedroom apartments and 4 no. 3 bedroom apartments - all apartments with terrace or balcony on elevations) as follows: Block A [4 storeys & 64 no. apartments] comprising 47 no. 1 bedroom apartments and 17 no. 2 bedroom apartments; Block C, [Part 3-4 storeys & 18 no. apartments] comprising 10 no. 1 bedroom apartments, 6 no. 2 bedroom apartments & 2 no. 3 bedroom apartments; Block F [Part 4-5 storeys & 48 no. apartments] comprising 36 no. 1 bedroom apartments and 12 no. 2 bedroom apartments; Block G [Part 3-4 storeys & 40 no. apartments]; comprising 30 no. 1 bedroom apartments and 10 no. 2 bedroom apartments; Block H [part 3-4 storeys & 24 no. apartments] comprising 16 no. 1 bedroom apartments, 6 no. 2 bedroom apartments & 2 no. 3 bedroom apartments;
- F) 11 no. single storey 2 bedroom later living houses with associated communal open space;
- G) 5.26 hectares of open space comprising Class 1 Open Space (c. 2.39 hectares in the western separate parcel of land), Public open space c.2.87 hectares, hard and soft landscaping (including public lighting & boundary treatment, ESB substations, bicycle and bin stores) and communal/semi-private open space for the proposed apartment units;
- H) Provision of surface water attenuation measures, connection to water supply, provision of foul drainage infrastructure (and Uisce Eireann diversion) to Uisce Eireann specifications and all ancillary site development, construction, and landscaping works including reprofiling of the site where required;
- I) The proposals will replace the previously permitted LRD under planning reg. ref. LRD0006/S3 & ACP Ref: 319343-24.

The proposed site outline and location is demonstrated in Figure 1.



Figure 1. Proposed site outline and location

Arborist

An Arboricultural Report has been prepared by Charles McCorkell Arboricultural Consultancy to accompany this planning application. This report details the following arboricultural impact of the proposed development:

'Loss of trees – The proposed development will require the removal of 34 trees and 7 groups of trees/hedgerows, and the partial removal of 19 groups of trees/hedgerows. In total, the removal of hedgerows is 1,639 linear metres (532 linear metres of which is to facilitate the road upgrades).

Of the 59 survey entries to be removed or partially removed, 1 tree and 5 hedgerows are of moderate quality and value (B Category), 27 trees and 20 groups of trees/hedgerows are of low quality and value (C Category), and 6 trees and 1 hedgerow are of poor quality (U Category).'

'The loss of trees and hedgerows will have an initial impact on the local canopy cover and on the character and appearance of the surrounding rural landscape. Considering the site's change of use, its landscape character will be impacted, and as the majority of trees and hedgerows to be removed are of low quality, the overall extent of the impact is not deemed to be significant.'

The tree removals plan is demonstrated in Figures 2 & 3.

Landscape

The landscape design for the proposed development has been prepared by Parkhood Landscape Architects to accompany this planning application. Following consultation with Parkhood Landscape Architects, 530 no. standard trees and 1,830 linear metres of native hedgerow will be planted onsite, compared to 34 no. trees and 1,581 linear metres of hedgerow scheduled for removal. A +10% net gain will be attained for trees and hedgerows onsite.

The proposed landscape masterplan is demonstrated in Figure 4.



Figure 2. Tree removals plan (north)



Figure 3. Tree removals plan (south)

Figure 4. Proposed landscape masterplan

Lighting

An Outdoor Lighting Report has been prepared by Lighting Reality to accompany this planning application. This report details the following Luminaires design for the proposed development. The proposed public lighting layout is demonstrated in Figures 5a-5g. Additionally, a letter provided by Morley Walsh Consulting Engineers T/A ENX (see Appendix 4.1A) demonstrate that the lighting plan has been designed in accordance with bat lighting guidelines.



Luminaire A Data

Supplier	C U Phosco
Type	P852K-12-F2-NW-CB1500-55W
Lamp(s)	740C
Lamp Flux (klm)	8.16
File Name	P852K-12-F2-NW-CB1500-55W.xls
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	761.9, 260.5, 34.9
No. in Project	101



Luminaire B Data

Supplier	C U Phosco
Type	P863-128-A2-4x4-740-SF-0275-52W
Lamp(s)	740SA
Lamp Flux (klm)	8.95
File Name	P863-128-A2-4x4-740-SF-0275-52W.xls
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	292.2, 26.8, 0.0
No. in Project	7



Luminaire C Data

Supplier	C U Phosco
Type	P852K-12-F2-WW-CA0650-25W
Lamp(s)	730C
Lamp Flux (klm)	3.02
File Name	P852K-12-F2-WW-CA0650-25W.xls
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	750.5, 280.0, 34.0
No. in Project	107



Luminaire D Data

Supplier	C U Phosco
Type	P852K-12-P4-WW-CA0650-25W
Lamp(s)	730C
Lamp Flux (klm)	2.97
File Name	P852K-12-P4-WW-CA0650-25W.xls
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	747.2, 125.8, 0.0
No. in Project	56



Luminaire E Data

Supplier	C U Phosco
Type	P852K-12-F2-WW-CA0200-9W
Lamp(s)	730C
Lamp Flux (klm)	1.04
File Name	P852K-12-F2-WW-CA0200-9W.xls
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	750.5, 280.0, 34.0
No. in Project	12



Luminaire F Data

Supplier	C U Phosco
Type	P852K-12-P4-WW-CA0200-9W
Lamp(s)	730C
Lamp Flux (klm)	1.02
File Name	P852K-12-P4-WW-CA0200-9W.xls
Maintenance Factor	0.80
Imax70,80,90(cd/klm)	747.2, 125.8, 0.0
No. in Project	21

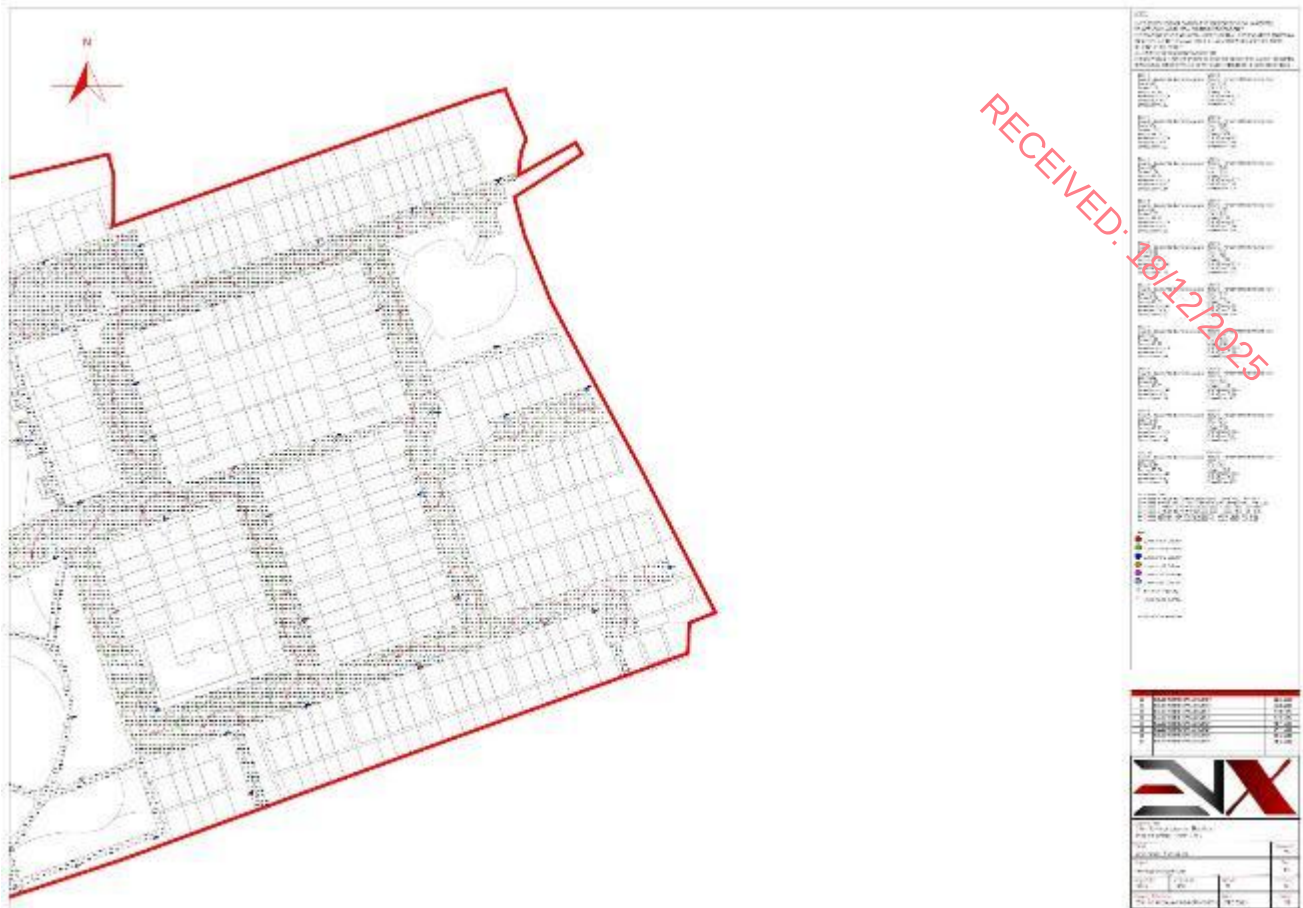


Figure 5a. Proposed public lighting layout (sheet 1)



Figure 5b. Proposed public lighting layout (sheet 2)

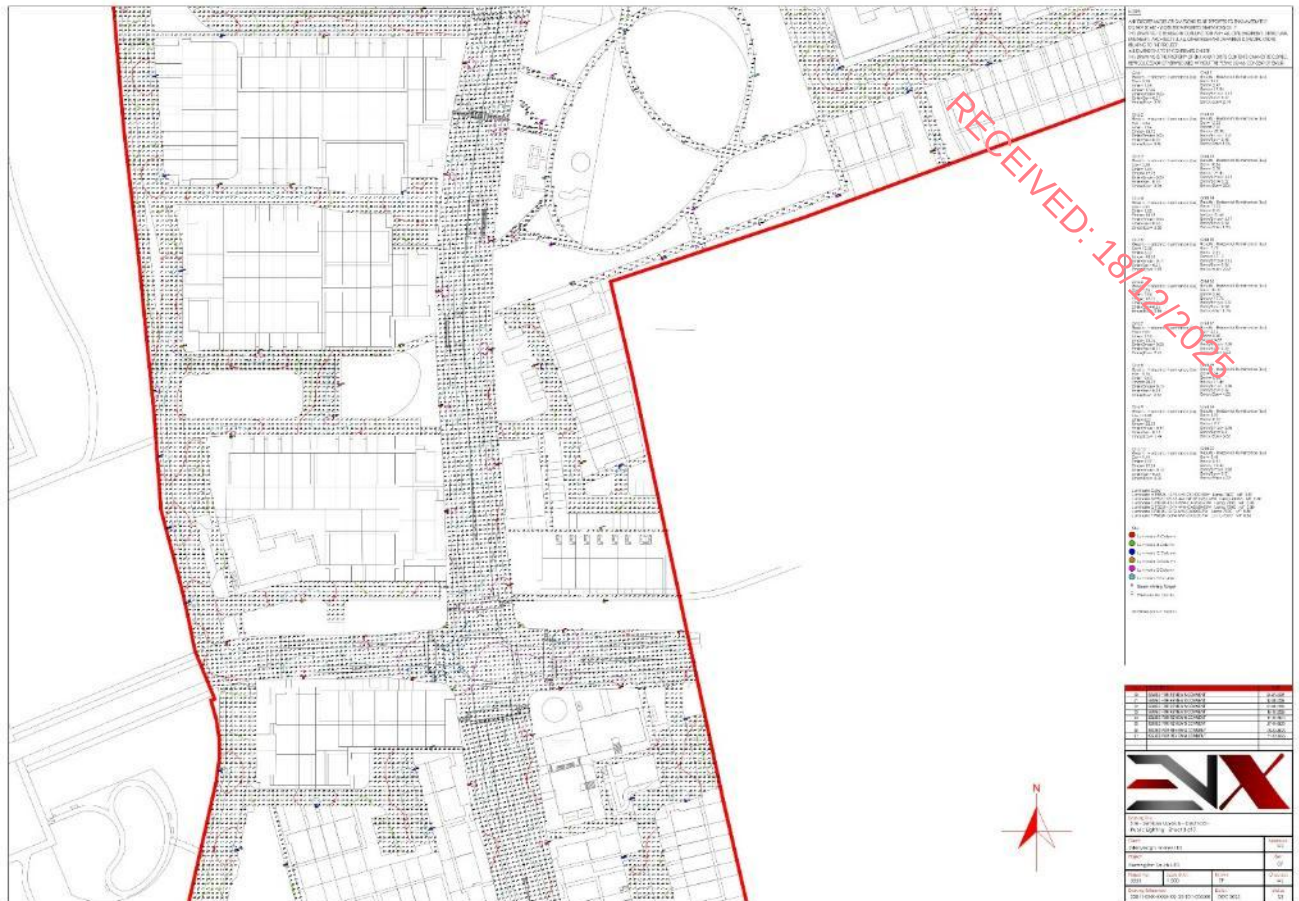


Figure 5c. Proposed public lighting layout (sheet 3)

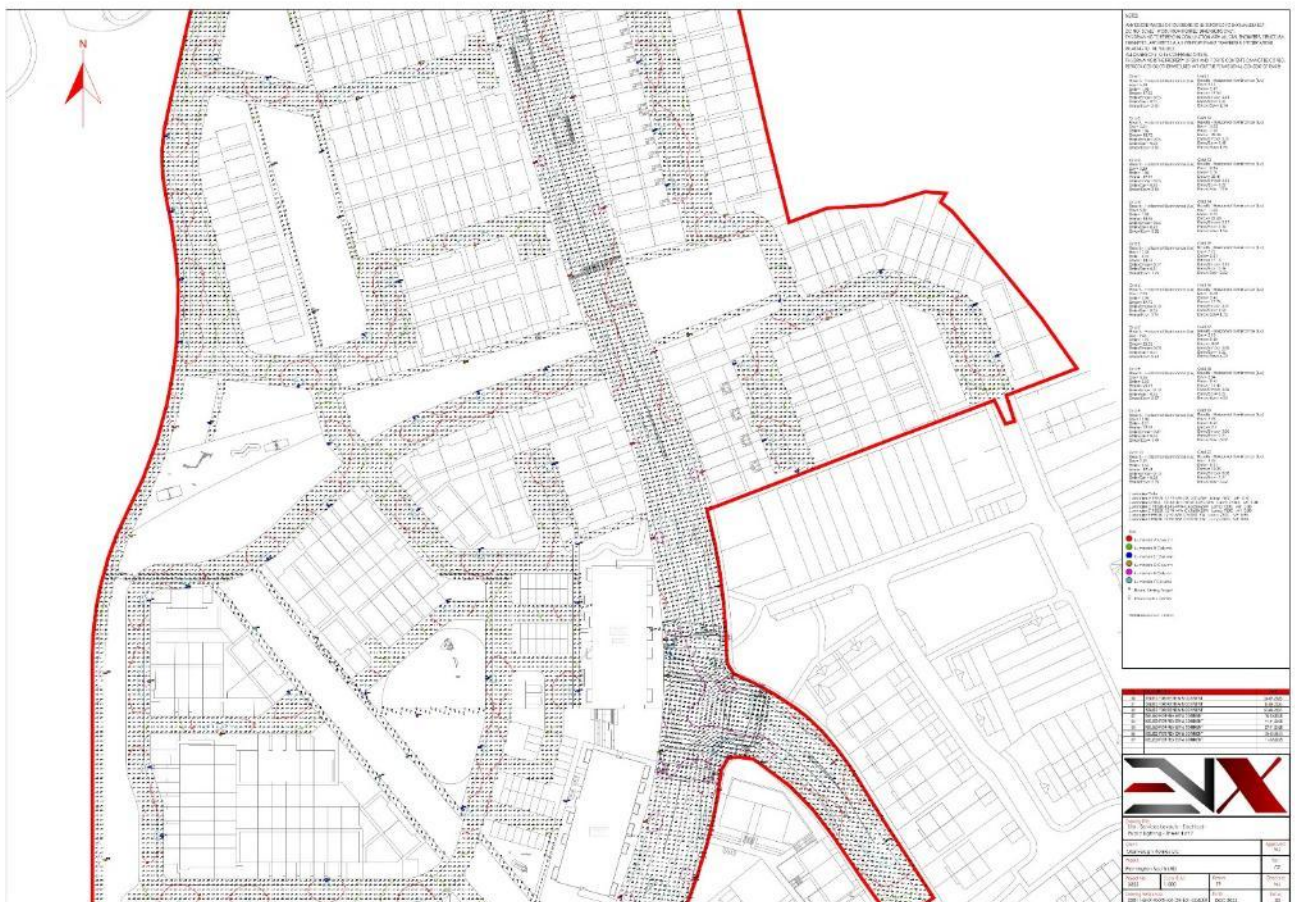
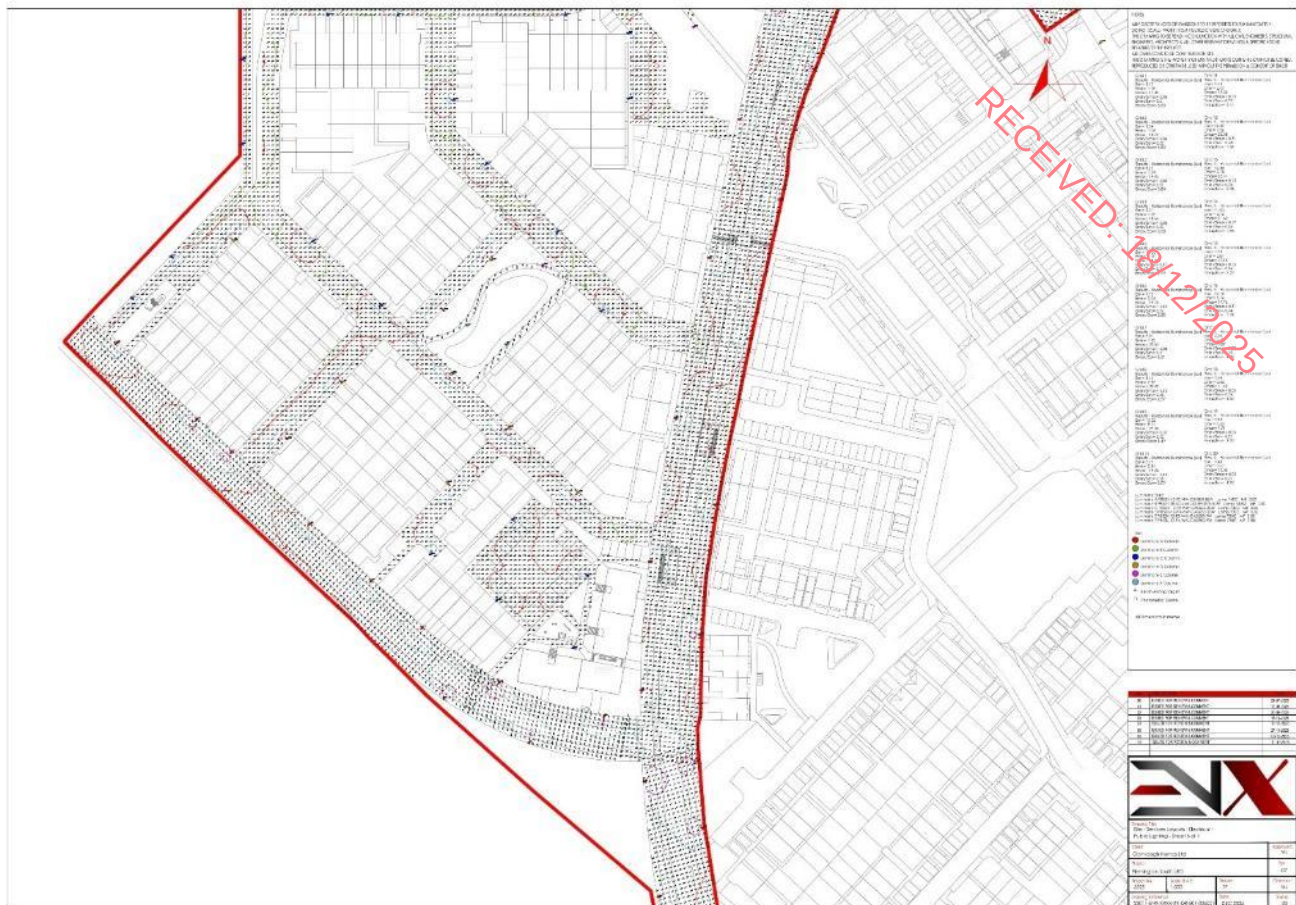


Figure 5d. Proposed public lighting layout (sheet 4)



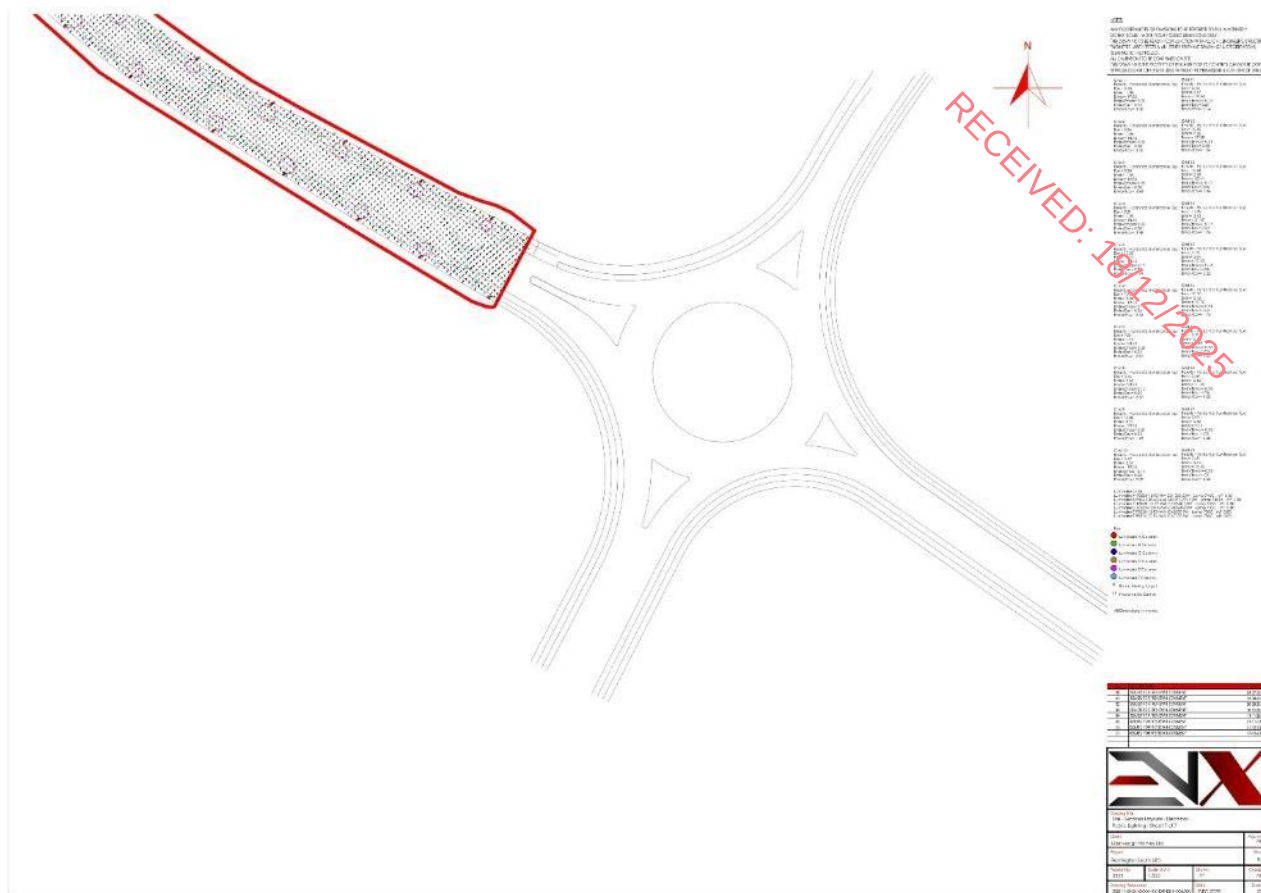


Figure 5g. Proposed public lighting layout (sheet 7)

Bat survey

Onsite trees and walls were inspected for bats and/or their signs using a powerful torch (141 Lumens) – Petzl MYO RXP. The site survey was supplemented by a review of Bat Conservation Ireland’s (BCIreland) National Bat Records Database. A bat detector and emergent survey was carried out by Bryan Deegan on the 20th April 2021, 08th June 2023, 13th June 2023 and the 27th June 2023. Bat detector and emergent surveys were carried out by Frank Spellman and Jack Doyle on the 22nd May 2025 & 14th August 2025.

Survey Methodology

As outlined in Marnell et al. 2022 ‘The presence of a large maternity roost can normally be determined on a single visit at any time of year, provided that the entire structure is accessible and that any signs of bats have not been removed by others. However, most roosts are less obvious. A visit during the summer or autumn has the advantage that bats may be seen or heard. Buildings (which for this definition exclude cellars and other underground structures) are rarely used for hibernation alone, so droppings deposited by active bats provide the best clues. Roosts of species which habitually enter roof voids are probably the easiest to detect as the droppings will normally be readily visible. Roosts of crevice-dwelling species may require careful searching and, in some situations, the opening up of otherwise inaccessible areas. If this is not possible, best judgement might have to be used and a precautionary approach adopted. Roosts used by a small number of bats, as opposed to large maternity sites, can be particularly difficult to detect and may require extensive searching backed up by bat detector surveys (including static detectors) or emergence counts.’ In relation to the factors influencing survey results the guidelines outlines the following ‘During the winter, bats will move around to find sites that present the optimum environmental conditions for their age, sex and bodyweight and some species will only be found in underground sites when the weather is particularly cold. During the summer, bats may be reluctant to leave their roost during heavy rain or when the temperature is unseasonably low, so exit counts should record the conditions under which they were made. Similarly, there may be times when females with young do not emerge at all or emerge only briefly and return while other bats are still emerging thus confusing the count. Within roosts, bats will move around according to the temperature and may or may not be visible on any particular visit. Bats also react to disturbance, so a survey the day after a disturbance event, may give a misleading picture of roost usage.’

The survey involved the methodologies outlined in Collins (2016) which included the roost inspection methodologies i.e. external methodology outlined in section 5.2.4.1 and the internal survey outlines in section 5.2.4.2 of the guidelines. In addition, the methodologies for Presence absence surveys (Section 7) was carried out for dust emergent surveys.'

As outlined in Collins (2016) 'The bat active period is generally considered to be between April and October inclusive (although the season is likely to be shorter in northern latitudes). However, because bats wake up during mild conditions, bat activity can also be recorded during winter months.'

Tree Potential Bat Roost Inspection

A ground level roost assessment was carried and used to examine the trees on/proximate to the site for features that could form bat roosts. Potential roosting features include heavy ivy growth, broken limbs, areas of decay, vertical or horizontal cracks, cracks in bark etc. All onsite trees were inspected for bat roosting potential during the daytime, where possible, for evidence of bat usage.

Emergent Surveys

Emergent survey were carried out by Bryan Deegan on the 20th April 2021, 08th June 2023, 13th June 2023 and the 27th June 2023. Emergent surveys were also carried out by Frank Spellman and Jack Doyle on the 22nd May 2025 & 14th August 2025. Bat activity was determined through visual observation and the use of an *Echo meter touch 2 Pro* handheld detector. Surveyors were positioned at areas containing features of bat roosting potential at dusk to determine evidence of bat roosting onsite.

Detector Surveys

Following an emergent survey, a bat detector survey was carried out on the 20th April 2021, 08th June 2023, 13th June 2023, 27th June 2023, 22nd May 2025 & 14th August 2025. Detector surveys were carried out onsite using an *Echo meter touch 2 Pro* handheld detector to determine bat activity. Bats are identified by their ultrasonic calls coupled with behavioural and flight observations. All areas of the site were surveyed for bat activity during the detector surveys.

Desk Study

A pre-survey bat data search was carried out in April 2021 and updated in June 2023, May 2025, and August 2025. This included examining records and data from the National Parks and Wildlife Service (NPWS), National Biological Data Centre (NBDC), Bat Conservation Ireland (BCI), in addition to aerial, 6-inch maps and satellite imagery.

Survey Constraints

All surveys were conducted within the active bat season and the transects covered the entire site multiple times during the night. Weather conditions were good with mild temperatures of 10°C after sunset. Winds were light and there was no rainfall. Insects were observed in flight during all surveys.

As outlined in Collins (2016) in relation to weather conditions '*The aim should be to carry out surveys in conditions that are close to optimal (sunset temperature 10°C or above, no rain or strong wind.), particularly when only one survey is planned.... Where surveys are carried out when the temperature at sunset is below 10°C should be justified by the ecologist and the effect on bat behaviour considered.*' There were no constraints in relation to the surveys carried out. All areas of the site were accessible, and weather conditions were optimal for bat assessments.

Survey Results

Buildings as Potential Bat Roosts

A metal barn (Plate 1) and a derelict house (Plate 2) are located to the north of the site. These are the only buildings located within the site boundaries. These buildings were inspected for evidence of bat roosts (e.g. bat droppings, grease markings at potential entry points). No bat roosts or evidence of bat activity was noted within the buildings on site.



Plate 1. Metal barn



Plate 2. Derelict House

Trees as Potential Bat Roosts

No confirmed bat roosts, or signs of bat activity (e.g. droppings, staining), were recorded in any of the onsite trees during the ground level assessment. There are no trees of high bat roosting potential on site. Several of the large ash trees near the metal shed on site are considered to be of low-medium bat roosting potential, primarily as a result of dense ivy growth.

Emergent & Detector Surveys

2021 & 2023 Results

No bats were recorded emerging from any onsite tree, building, or nearby structure. No confirmed bat roosts were recorded onsite. Foraging and transiting activity of the following bat species was recorded across the emergent and detector surveys:

- Common Pipistrelle (*Pipistrellus pipistrellus sensu lato*)
- Soprano Pipistrelle (*Pipistrellus pygmaeus*)
- Leisler Bat (Lesser Noctule (*Nyctalus leisleri*))

Foraging activity of three bat species (Common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*), and Leislars bat (Lesser Noctule) (*Nyctalus leisleri*) were noted on site across all surveys. Foraging activity of all three species was noted in the vicinity of the hedgerows with some additional activity in the grassland area (Figure 6).

2025 Results

No bats were recorded emerging from any onsite tree, building, or nearby structure. No confirmed bat roosts were recorded onsite. Similar to results recorded during the 2021 & 2023 surveys, foraging and transiting activity of the following bat species was recorded across the emergent and detector surveys:

- Common Pipistrelle (*Pipistrellus pipistrellus sensu lato*)
- Soprano Pipistrelle (*Pipistrellus pygmaeus*)
- Leisler Bat (Lesser Noctule (*Nyctalus leisleri*))

Foraging activity of all three species was noted in the vicinity of the hedgerows with some additional activity in the grassland area (Figure 7).



Figure 6. Bat activity recorded onsite during 2021 & 2023 surveys

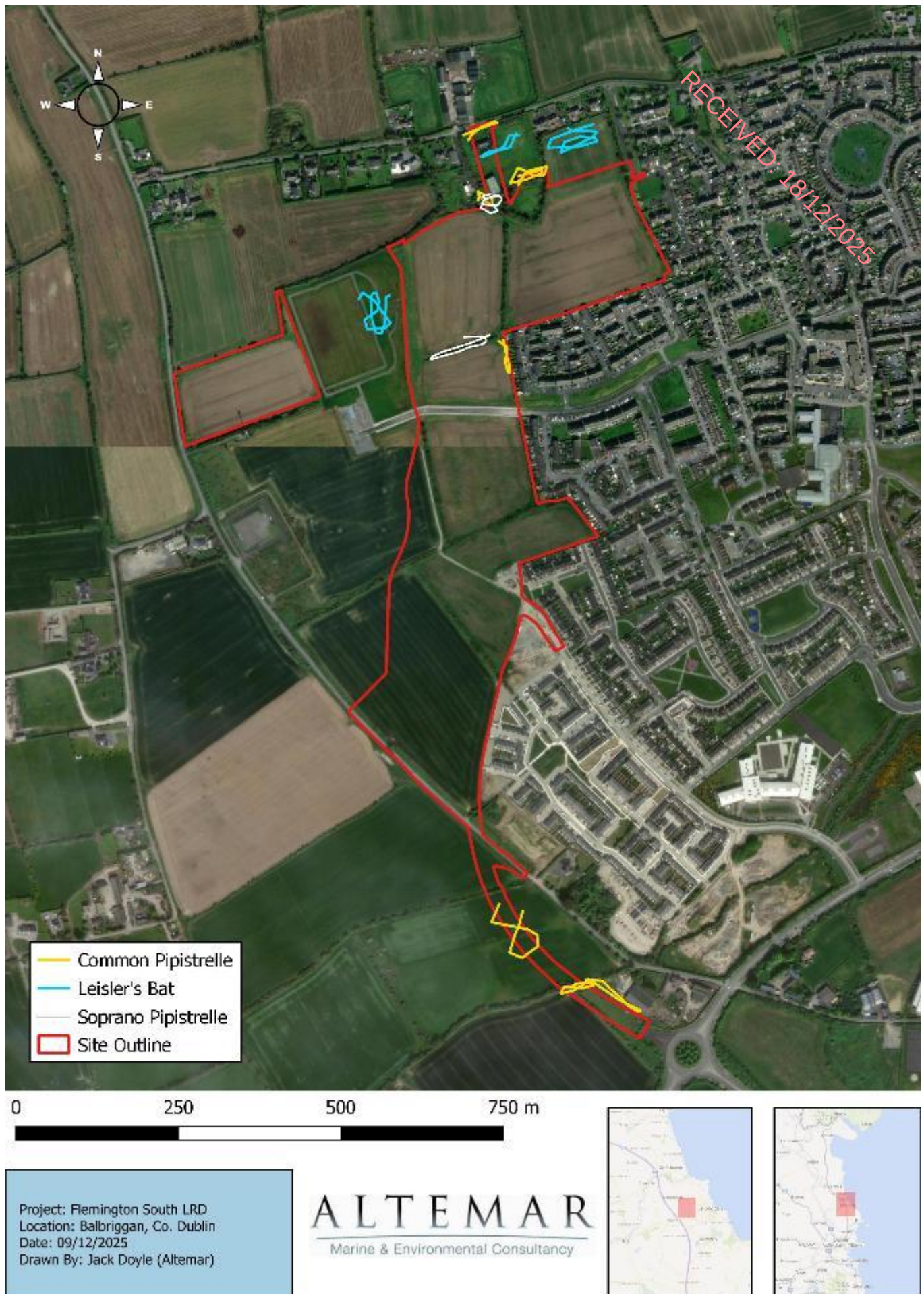


Figure 7. Bat activity recorded onsite during 2025 surveys

Review of local bat records

The review of existing bat records (sourced from Bat Conservation Ireland's National Bat Records Database) within the four 2km² grids that encompass the site (Reference grids O16S, O16R, O16W, O16X) encompassing the study area reveals that five of the nine known Irish species have been observed locally (Table 1). The National Biodiversity Data Centre's online viewer was consulted in order to determine whether there have been recorded bat sightings in the wider area. This is visually represented in Figures 8-10. The following species were noted in the wider area: Daubenton's Bat (*Myotis daubentonii*), Brown Long-eared Bat (*Myotis daubentonii*), Common Pipistrelle (*Pipistrellus pipistrellus*), Soprano Pipistrelle (*Pipistrellus pygmaeus*), and Lesser Noctule (*Nyctalus leisleri*) (Figures 8-10).

Table 1: Status of bat species within the four 2km² grids (O16S, O16R, O16W, O16X)

Species Name	Record Count	Date of Last Record	Note
O16R			
None	N/A	N/A	N/A
O16S			
Brown Long-eared Bat (<i>Plecotus auritus</i>)	1	26/07/2011	National Bat Database of Ireland
Common Pipistrelle (<i>Pipistrellus pipistrellus</i>)	28	15/08/2019	National Bat Database of Ireland
Daubenton's Bat (<i>Myotis daubentonii</i>)	34	29/08/2021	National Bat Database of Ireland
Lesser Noctule (<i>Nyctalus leisleri</i>)	17	15/08/2019	National Bat Database of Ireland
Soprano Pipistrelle (<i>Pipistrellus pygmaeus</i>)	15	15/08/2019	National Bat Database of Ireland
O16W			
None	N/A	N/A	N/A
O16X			
Common Pipistrelle (<i>Pipistrellus pipistrellus</i>)	1	21/07/2023	National Bat Database of Ireland
Lesser Noctule (<i>Nyctalus leisleri</i>)	1	21/07/2023	National Bat Database of Ireland
Soprano Pipistrelle (<i>Pipistrellus pygmaeus</i>)	1	21/07/2023	National Bat Database of Ireland

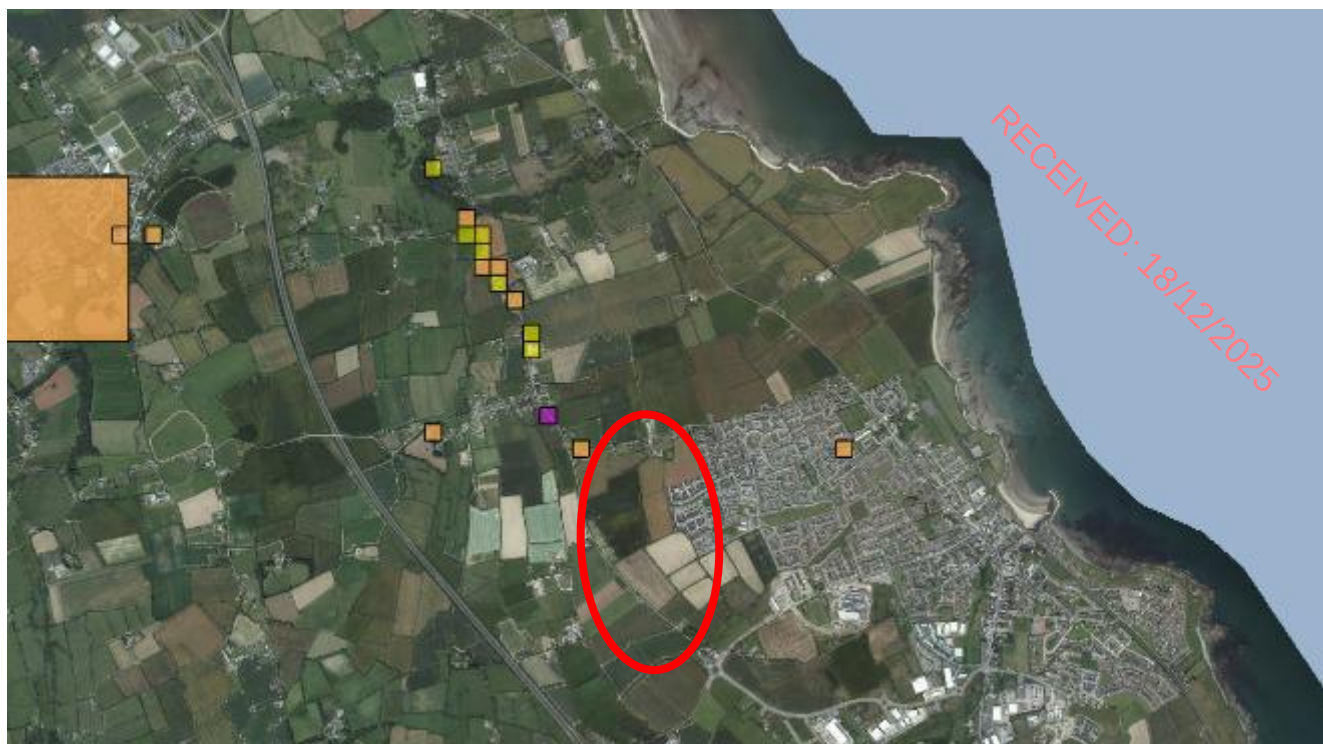


Figure 8. Common Pipistrelle (*Pipistrellus pipistrellus*) (yellow), Leisler's Bat (*Nyctalus leisleri*) (purple), and both Common Pipistrelle and Leisler's Bat (orange) (Source NBDC) (Approx. site location – red circle)

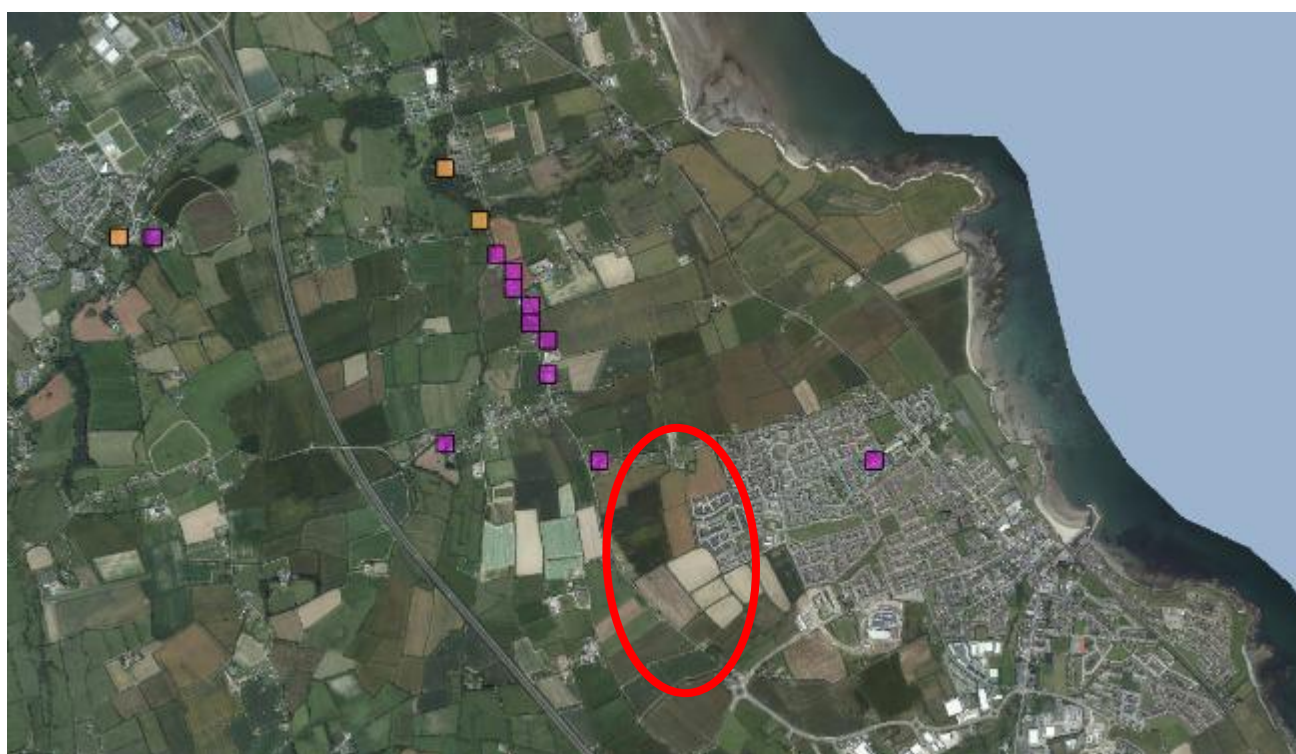


Figure 9. Soprano Pipistrelle (*Pipistrellus pygmaeus*) (purple), and both Soprano Pipistrelle and Daubenton's Bat (*Myotis daubentonii*) (orange) (Source NBDC) (Approx. site location – red circle)



Figure 10. Brown Long-eared Bat (*Plecotus auritus*) (yellow) (Source NBDC) (Approx. site location – red circle)

Specifically, NBDC records show sightings of bat species in locations that are in close proximity to the subject site:

1. Soprano Pipistrelle (*Pipistrellus pygmaeus*) in grid reference O177643. Recorded on 15/08/2005 and located 185m North of the subject site.
2. Soprano Pipistrelle (*Pipistrellus pygmaeus*) in grid reference O177643. Recorded on 20/07/2006 and located 185m North of the subject site.
3. Soprano Pipistrelle (*Pipistrellus pygmaeus*) in grid reference O177643. Recorded on 29/07/2007 and located 185m North of the subject site.
4. Soprano Pipistrelle (*Pipistrellus pygmaeus*) in grid reference O177643. Recorded on 21/08/2008 and located 185m North of the subject site.
5. Soprano Pipistrelle (*Pipistrellus pygmaeus*) in grid reference O177643. Recorded on 28/07/2014 and located 185m North of the subject site.
6. Lesser Noctule (*Nyctalus leisleri*) in grid reference O177643. Recorded on 26/07/2009 and located 185m North of the subject site.
7. Lesser Noctule (*Nyctalus leisleri*) in grid reference O177643. Recorded on 09/08/2011 and located 185m North of the subject

Potential Impact of the development on Bats

No definitive bat roosts will be lost due to this development and the species expected to occur onsite should persist in the area. However, in the absence of mitigation the development is likely to displace bats from foraging on the site during construction and operation. The potential for collision risk and impact on flight paths in relation to bats is considered low as the buildings would be deemed to be clearly visible to bats.

Mitigation Measures

As outlined in Marnell et al. (2022) *"Mitigation should be proportionate. The level of mitigation required depends on the size and type of impact, and the importance of the population affected."* In addition as outlined in Marnell et. al (2022) *'Mitigation for bats normally comprises the following elements:*

- *Avoidance of deliberate, killing, injury or disturbance – taking all reasonable steps to ensure works do not harm individuals by altering working methods or timing to avoid bats. The seasonal occupation of most roosts provides good opportunities for this*
- *Roost creation, restoration or enhancement – to provide appropriate replacements for roosts to be lost or damaged*
- *Long-term habitat management and maintenance – to ensure the population will persist*
- *Post-development population monitoring – to assess the success of the scheme and to inform management or remedial operations.'*

No trees of high bat roosting potential to be lost as a result. Three bat species were noted onsite. As a result of the findings of the assessment, the following mitigation will be implemented:

Mitigation by Design:

- 530 no. standard trees and 1,830 linear metres of native hedgerow will be planted onsite, compared to 34 no. trees and 1,581 linear metres of hedgerow scheduled for removal. A +10% net gain will be attained for trees and hedgerows onsite. This compensatory planting will create suitable foraging and commuting features for local bat species.

Construction:

- Lighting at all construction stages will be done sensitively on site with no direct lighting of site boundaries.
- Prior to site clearance, the ecologist and arborist will assess the site works and oversee habitat protection measures.
- Inspection of buildings on site by a bat ecologist prior to demolition and the control of light spillage into adjacent habitats to avoid light spill of the surrounding hedgerows.
- Lighting on site during construction will be subject to approval of the ecologist and will not involve the lighting of treelines and hedgerows.

Operation:

- A project ecologist will be appointed to oversee completion of all landscape, lighting and drainage works.
- Lighting will be carried out as per lighting design.

Predicted Residual Impact of Planned Development on Bats

The surveys found no evidence of roosting bats on site. The proposed development will not result in the loss of any bat roost as there are no confirmed bat roosts onsite. The proposed development will change the local environment as demolition works are proposed and new structures are to be erected. Lighting in the residential development has been designed to comply with bat lighting guidelines. Compensatory hedgerows will be planted. Foraging would be expected to continue on site. The proposed development will not impact on flightlines. Mitigation measures are proposed.

The overall impact following the implementation of mitigation be a Minor adverse / International / Negative Impact / Not significant / long term impact.

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RECEIVED: 18/12/2025

Public Lighting Submission – Flemington South LRD, Balbriggan, Co. Dublin

Dear Sir / madam,

In relation to the public lighting submission for the proposed residential development at Flemington South LRD, Balbriggan, Co. Dublin. Please find attached public lighting layout drawing and calculation report.

We can confirm that the public lighting has been designed to a lighting class of P4 (EN13201), with a step back to Lighting class P5 after 12 O'clock Midnight.

We can further confirm we have designed the public lighting for the scheme in accordance with Bat Conservation Ireland guidelines; Bat Conservation Ireland (Bats and Lighting; Guidance Notes for Planners, Engineers, Architects and Developers, BCI, 2010) and the Bat Conservation Trust (Guidance Note 08/18 Bats and Artificial Lighting in the UK (BCT, 2018).

A lighting accessory in the form of cowls may be installed where necessary as a preventative measure to reduce unwanted light spill. The proposed lamps have limited backward light properties thus assisting in reducing backward light spill. Lamps have also been specified with 0 Degree tilt to ensure limited unwanted light spill. Lamps shall have a narrow spectrum and limited UV component.

If you require anything further, please do not hesitate to contact me.

Kind regards,

A handwritten signature in black ink, appearing to read 'Kieran Morley'.

Kieran Morley
Managing Director
MORLEY WALSH CONSULTING ENGINEERS T/A ENX



RECEIVED: 18/12/2025

**Breeding Bird Assessment for a proposed development at Flemington
South, Balbriggan, Co. Dublin**



16th December 2025

Prepared by: Frank Spellman of Altemar Ltd.
On behalf of: Glenveagh Homes Limited

Altemar Ltd., 50 Templecarrig Upper, Delgany, Co. Wicklow. 00-353-1-2010713. info@altemar.ie
Directors: Bryan Deegan and Sara Corcoran
Company No.427560 VAT No. 9649832U
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Document Control Sheet			
Client	Glenveagh Homes Limited		
Project	Breeding Bird Assessment for a proposed development at Flemington South, Balbriggan, Co. Dublin		
Report	Breeding Bird Assessment		
Date	16 th December 2025		
Version	Author	Reviewed	Date
Final	Frank Spellman	Bryan Deegan	16 th December 2025

RECEIVED: 18/12/2025

SUMMARY

Structure/features:	The survey area consists primarily of grassland, arable crops, hedgerows, treelines, mature trees, scrub, and man-made structures.
Location:	Lands at Balbriggan, Co. Dublin
Bird species breeding (survey area):	Blackbird, blackcap, blue tit, chaffinch, dunnoek, goldfinch, herring gull, hooded crow, house sparrow, linnet, robin, song thrush, starling, swallow, woodpigeon, wren, yellowhammer.
Proposed work:	Residential development.
Impact on breeding birds:	The proposed development will result in a long-term low adverse effect on breeding birds due to habitat loss. Mitigation measures are proposed.
Surveys by:	Frank Spellman.
Survey dates:	22 nd April, 9 th May and 22 nd May 2025.

Description of the Proposed Project

The development will consist of the construction of 815 no. dwellings (610 no. houses, 194 apartments & 11 no. later living dwellings), a portion of the C-Ring Road, open space, community building/retail floorspace and 2 no. creches as follows:

- A) Demolition of existing single storey dwelling (c. 154 sq. m) and agricultural outbuilding (c. 366 sq. m) located to the south of Flemington Lane;
- B) Provision of portion of '*C-Ring Road*' from Flemington Lane [to include junctions and ancillary footpaths, cycle paths, lighting, bus stops, boundary wall to adjoining owner, and tie in to existing roads/agricultural access points] to link into the existing R122 roundabout with vehicular access also from the Boulevard Road, Hamlet Lane, & Flemington Lane along with associated amendments to the layout of the Local Road L1130 (also known as the Clonard Road including the creation of a cul de sac arrangement to the south of the C-Ring Road); the provision of car parking spaces (1,037 no.), bicycle parking spaces (1,144 no.) and all internal roads and footpaths and bicycle and bin stores, & substations;
- C) Provision of a community pavilion (2 storeys) comprising community floorspace of c. 730 sq. m (with flexible internal spaces) along with a retail unit (c. 419 sq. m) at ground floor of apartment Block F as well as 2 no. 2 storey creches c. 530 sq. m each with ancillary parking and open space areas;
- D) 610 no. terraced, semi-detached & detached houses comprising 318 no. 2-bedroom houses (2 storey), 254 no. 3-bedroom houses (2 storey) and 38 no. 4-bedroom houses [house types B1/F4/F5 with variants] 3 storeys;
- E) 194 no. apartments in 5 no. apartment buildings (52 no. studio apartments, 87 no. 1 bedroom apartments, 51 no. 2 bedroom apartments and 4 no. 3 bedroom apartments - all apartments with terrace or balcony on elevations) as follows: Block A [4 storeys & 64 no. apartments] comprising 47 no. 1 bedroom apartments and 17 no. 2 bedroom apartments; Block C, [Part 3-4 storeys & 18 no. apartments] comprising 10 no. 1 bedroom apartments, 6 no. 2 bedroom apartments & 2 no. 3 bedroom apartments; Block F [Part 4-5 storeys & 48 no. apartments] comprising 36 no. 1 bedroom apartments and 12 no. 2 bedroom apartments; Block G [Part 3-4 storeys & 40 no. apartments]; comprising 30 no. 1 bedroom apartments and 10 no. 2 bedroom apartments; Block H [part 3-4 storeys & 24 no. apartments] comprising 16 no. 1 bedroom apartments, 6 no. 2 bedroom apartments & 2 no. 3 bedroom apartments;
- F) 11 no. single storey 2 bedroom later living houses with associated communal open space;
- G) 5.26 hectares of open space comprising Class 1 Open Space (c. 2.39 hectares in the western separate parcel of land), Public open space c.2.87 hectares, hard and soft landscaping (including public lighting & boundary treatment, ESB substations, bicycle and bin stores) and communal/semi-private open space for the proposed apartment units;
- H) Provision of surface water attenuation measures, connection to water supply, provision of foul drainage infrastructure (and Uisce Eireann diversion) to Uisce Eireann specifications and all ancillary site development, construction, and landscaping works including reprofiling of the site where required;
- I) The proposals will replace the previously permitted LRD under planning reg. ref. LRD0006/S3 & ACP Ref: 319343-24.

The proposed site outline, location, and survey area is demonstrated in Figures 1 & 2.

Landscape

The landscape strategy for the proposed development has been prepared by Park Hood Landscape Architects to accompany this planning application. Following consultation with Parkhood Landscape Architects, 530 no. standard trees and 1,830 linear metres of native hedgerow will be planted onsite, compared to 34 no. trees and 1,581 linear metres of hedgerow scheduled for removal. A +10% net gain will be attained for trees and hedgerows onsite.

The proposed landscape plans is demonstrated in figure 3.



Figure 1. Proposed site outline and survey area

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Site Outline
Survey area

0 0.5 1 1.5 2 2.5 km

Project: Flemington South LRD
Location: Balbriggan, Co. Dublin
Date: 09/12/2025
Drawn By: Jack Doyle (Altamar)

ALTEMAR
Marine & Environmental Consultancy



Figure 2. Proposed site and survey area location.



Figure 3. Proposed landscape plan

Competency of assessor

Since its inception in 2001, Altamar has been delivering ecological and environmental services to a broad range of clients. Operational areas include: residential; infrastructural; renewable; oil & gas; private industry; Local Authorities; EC projects; and, State/semi-State Departments.

Frank Spellman (BSc Zoology, MSc Zoology).

This report has been prepared by Frank Spellman. Frank has extensive experience in carrying out a wide range of fauna surveys as both a sub-contractor and employee for environmental consultancies and organisations in Ireland and the US. These include both roving and static acoustic bat surveys, terrestrial non-avian mammal surveys, breeding/wintering bird surveys, and freshwater ecology surveys. Frank has been lead ornithologist on numerous development projects within Ireland carrying out full wintering bird and breeding bird assessments.

Legislative context

The Wildlife Act 1976 protects wild birds in Ireland. Based on this legislation it is an offence to wilfully interfere with or destroy wild birds and their nests and eggs (other than the wild species mentioned in the Third Schedule of this Act). Under this legislation it is an offence for any person who *"wilfully takes or removes the eggs or nest of a protected wild bird otherwise than under and in accordance with such a licence, wilfully destroys, injures or mutilates the eggs or nest of a protected wild bird, wilfully disturbs a protected wild bird on or near a nest containing eggs or unflown young."*

Habitats Directive- Council Directive 92/43/EEC 1992 on the conservation of natural habitats and of wild fauna and flora has been transposed into Irish Law, including, via, *inter alia*, the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended).

Council Directive 2009/147/EC 2010 on the conservation of wild birds provides for the conservation of wild birds by, among other things, classifying important ornithological sites as Special Protection Areas. The Directive relates to the conservation of all species of naturally occurring birds in the wild state, their eggs, nests and habitats in the European territory of the Member States. The Directive prohibits in particular:

- deliberate killing or capture by any method;
- deliberate destruction of, or damage to, their nests and eggs or removal of their nests;
- taking their eggs in the wild and keeping these eggs even if empty;
- deliberate disturbance of these birds particularly during the period of breeding and rearing, in so far as disturbance would be significant having regard to the objectives of this Directive;
- keeping birds of species the hunting and capture of which is prohibited.

Under the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended), notwithstanding any consent, statutory or otherwise, given to a person by a public authority or held by a person, except in accordance with a licence granted by the Minister under Regulation 54, a person who in respect of the species referred to in Part 1 of the First Schedule:

- deliberately captures or kills any specimen of these species in the wild,
- deliberately disturbs these species particularly during the period of breeding, rearing, hibernation and migration,
- deliberately takes or destroys eggs of those species from the wild,
- damages or destroys a breeding site or resting place of such an animal, or
- keeps, transports, sells, exchanges, offers for sale or offers for exchange any specimen of these species taken in the wild, other than those taken legally as referred to in Article 12(2) of the Habitats Directive,
- shall be guilty of an offence.

Breeding bird survey

This report presents the results of three site visits by Frank Spellman on the 22nd April, 9th May and 22nd May 2025. A breeding bird transect survey was carried out on each occasion.

Survey methodology

This Breeding bird survey was carried out based on the BTO Common Bird Census (Bibby *et al.*, 2000 and Gilbert *et al.*, 1998) and following CIEEM guidelines.

A 15-minute settlement period was given following arrival to allow resumption of bird activity after any possible disturbance caused by arrival to the site. Various features and habitats such as scrub, grassland, arable crops, treelines, mature trees, hedgerows, man-made structures and amenity grassland were present within the survey area. A single transect following the full perimeter of the survey area was carried out on each occasion, covering all areas and features available for breeding activity within and immediately adjacent to the survey area. General transect direction was alternated between surveys to account for potential activity level variations throughout morning hours. Each survey was carried out by a single surveyor.

The survey was carried out over 2.5 – 3.5 hours on 3 occasions, beginning at dawn and ending once all areas/features had been surveyed. Care was taken not to double count any observations. Weather conditions were optimal on each occasion.

Survey results

Habitats of breeding bird potential

A desk and ground level breeding habitat assessment were carried and used to examine the structures and vegetation on site for features that could provide breeding habitat. Potential nesting features include scrub, treelines, mature conifer/deciduous canopies, ivy, grassland, reeds, artificial structures etc. All vegetated areas and man-made structures on site were assessed for breeding bird potential.

Areas of high breeding bird potential included hedgerows, treelines, mature trees, scrub, and man-made structures throughout the survey area and its boundaries. Grassland and arable crops were heavily used by locals for walking/dog-walking and were unlikely to be used by breeding birds.

Breeding activity survey

A total of 24 species were recorded within the survey area across three surveys. Of these species, herring gull, house martin, house sparrow, linnet, skylark, starling and swallow are amber listed Bird of Conservation Concern in Ireland (BoCCI). Yellowhammer was also recorded on site which is a red listed BoCCI. The remaining species are all green listed BoCCI.

17 species were recorded breeding or displaying behaviour indicative of breeding within the survey area (table 1). Five breeding species are amber-listed BoCCI. One breeding species (yellowhammer) is a red-listed BoCCI. The remainder of breeding species are green-listed BoCCI. Locations of breeding evidence recorded are demonstrated in figure 4.

Breeding activity was found throughout the survey area. A number of areas held higher concentration of breeding activity. Hotspots for breeding included a hedgerow/treeline in the north, old agricultural sheds in the north (multiple swallow nests) and a section of treeline/scrub in the east of the survey area. A section of hedgerow in the centre of the site was being used by breeding yellowhammer (re-listed BoCCI) and linnet (amber-listed BoCCI). Breeding hotspots are demonstrated in figure 5.

Table 1. Species confirmed breeding within the survey area..

Common name	BTO	Latin name	BoCCI
Blackbird	B.	<i>Turdus merula</i>	Green
Blackcap	BC	<i>Sylvia atricapilla</i>	Green
Blue Tit	BT	<i>Cyanistes caeruleus</i>	Green
Chaffinch	CH	<i>Fringilla coelebs</i>	Green
Dunnoek	D.	<i>Prunella modularis</i>	Green
Goldfinch	GO	<i>Carduelis carduelis</i>	Green
Herring Gull	HG	<i>Larus argentatus</i>	Amber
Hooded Crow	HC	<i>Corvus cornix</i>	Green
House Sparrow	HS	<i>Passer domesticus</i>	Amber
Linnet	LI	<i>Carduelis cannabina</i>	Amber
Robin	R.	<i>Erithacus rubecula</i>	Green
Song Thrush	ST	<i>Turdus philomelos</i>	Green
Starling	SG	<i>Sturnus vulgaris</i>	Amber
Swallow	SL	<i>Hirundo rustica</i>	Amber
Woodpigeon	WP	<i>Columba palumbus</i>	Green
Wren	WR	<i>Troglodytes troglodytes</i>	Green
Yellowhammer	Y.	<i>Emberiza citrinella</i>	Red

Table 2. Total species recorded within the survey area.

Common name	BTO	Latin name	BoCCI
Blackbird	B.	<i>Turdus merula</i>	Green
Blackcap	BC	<i>Sylvia atricapilla</i>	Green
Blue Tit	BT	<i>Cyanistes caeruleus</i>	Green
Chaffinch	CH	<i>Fringilla coelebs</i>	Green
Dunnock	D.	<i>Prunella modularis</i>	Green
Goldfinch	GO	<i>Carduelis carduelis</i>	Green
Herring Gull	HG	<i>Larus argentatus</i>	Amber
Hooded Crow	HC	<i>Corvus cornix</i>	Green
House Martin	HM	<i>Delichon urbicum</i>	Amber
House Sparrow	HS	<i>Passer domesticus</i>	Amber
Jackdaw	JD	<i>Corvus monedula</i>	Green
Linnet	LI	<i>Carduelis cannabina</i>	Amber
Magpie	MG	<i>Pica pica</i>	Green
Pheasant	PH	<i>Phasianus colchicus</i>	Green
Raven	RN	<i>Corvus corax</i>	Green
Robin	R.	<i>Erithacus rubecula</i>	Green
Rook	RO	<i>Corvus frugilegus</i>	Green
Skylark	S.	<i>Alauda arvensis</i>	Amber
Song Thrush	ST	<i>Turdus philomelos</i>	Green
Starling	SG	<i>Sturnus vulgaris</i>	Amber
Swallow	SL	<i>Hirundo rustica</i>	Amber
Woodpigeon	WP	<i>Columba palumbus</i>	Green
Wren	WR	<i>Troglodytes troglodytes</i>	Green
Yellowhammer	Y.	<i>Emberiza citrinella</i>	Red

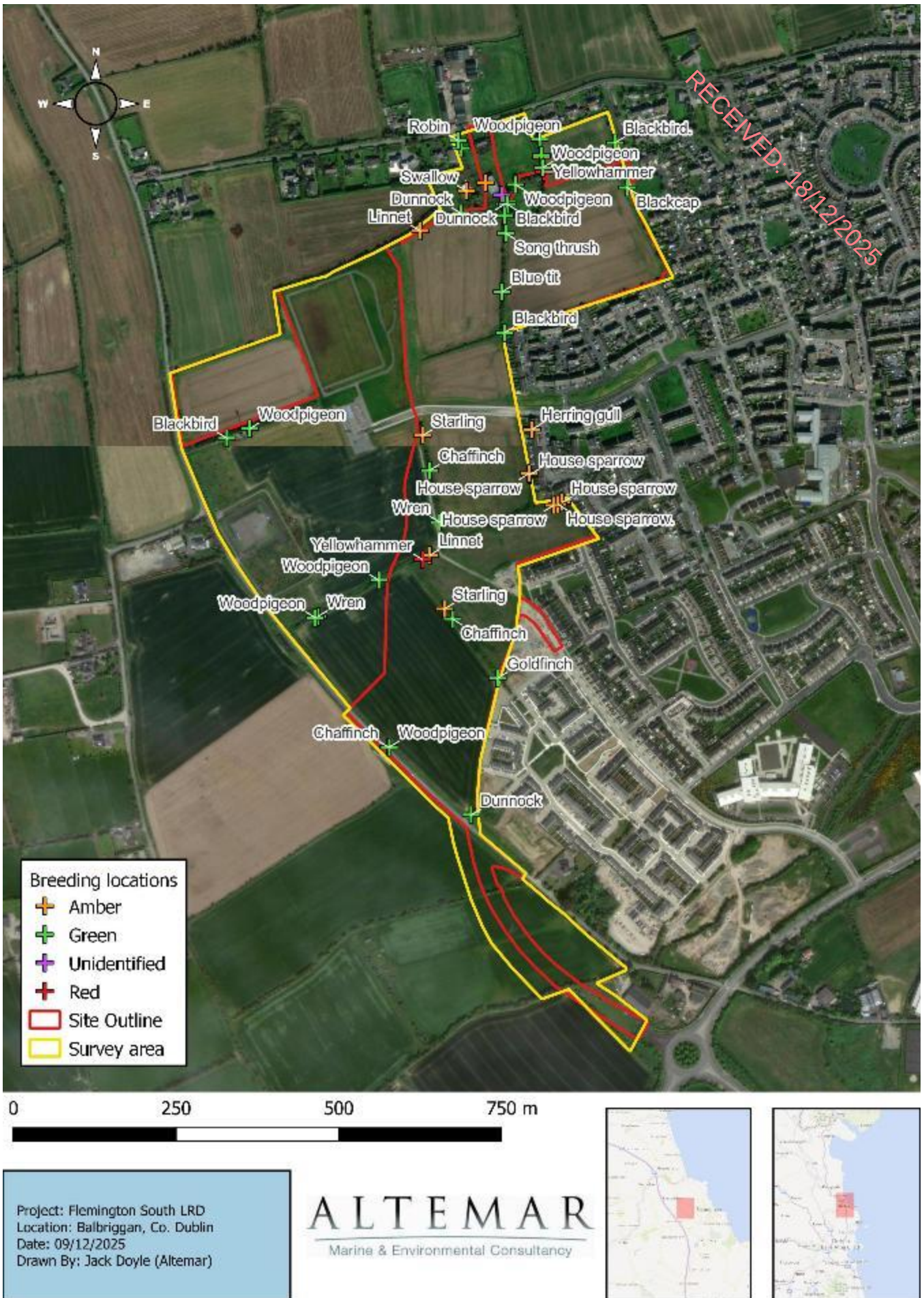


Figure 4. Breeding locations.



Figure 5. Breeding hotspots.

Breeding bird assessment findings

Review of local bird records

The review of existing bird records (sourced from NBDC Database) within four 2 km² grids (Reference grid O16S, O16R, O16W, O16X) encompassing the study area reveals that 70 known bird species have previously been observed and recorded locally (*Table 3*).

Table 3: Bird species recorded within the four 2km² grids (O16S, O16R, O16W, O16X)

<i>Barn Owl (Tyto alba); Bar-tailed Godwit (Limosa lapponica); Black-headed Gull (Chroicocephalus ridibundus); Black-tailed Godwit (Limosa limosa); Brent Goose (Branta bernicla); Common Guillemot (Uria aalge); Common Gull (Larus canus); Common Scoter (Melanitta nigra); Cormorant (Phalacrocorax carbo); Curlew (Numenius arquata); Dunlin (Calidris alpina); Goldcrest (Regulus regulus); Golden Plover (Pluvialis apricaria); Great Black-backed Gull (Larus marinus); Great Crested Grebe (Podiceps cristatus); Great Northern Diver (Gavia immer); Greenfinch (Chloris chloris); Greenshank (Tringa nebularia); Grey Plover (Pluvialis squatarola); Greylag Goose (Anser anser); Grey wagtail (Motacilla cinerea); Herring Gull (Larus argentatus); House Martin (Delichon urbicum); House Sparrow (Passer domesticus); Jack Snipe (Lymnocyptes minimus); Kestrel (Falco tinnunculus); Kingfisher (Alcedo atthis); Kittiwake (Rissa tridactyla); Knot (Calidris canutus); Lapwing (Vanellus vanellus); Lesser Black-backed Gull (Larus fuscus); Linnet (Linaria cannabina); Little Egret (Egretta garzetta); Meadow Pipit (Anthus pratensis); Merlin (Falco columbarius); Mistle Thrush (Turdus viscivorus); Oystercatcher (Haematopus ostralegus); Peregrine (Falco peregrinus); Pheasant (Phasianus colchicus); Pink-footed Goose (Anser brachyrhynchus); Purple Sandpiper (Calidris maritima); Razorbill (Alca torda); Red-breasted Merganser (Mergus serrator); Redshank (Tringa totanus); Redwing (Turdus ilacus); Red-throated Diver (Gavia stellata); Ringed Plover (Charadrius hiaticula); Robin (Erithacus rubecula); Rock Dove (Columba livia); Sand Martin (Riparia riparia); Sandwich Tern (Thalasseus sandvicensis); Shag (Gulosus aristotelis); Short-eared Owl (Asio flammeus); Skylark (Alauda arvensis); Snipe (Gallinago gallinago); Sparrowhawk (Accipiter nisus); Spotted Flycatcher (Muscicapa striata); Starling (Sturnus vulgaris); Spotted Redshank (Tringa erythropus); Stock Dove (Columba oenas); Stonechat (Saxicola rubicola); Swallow (Hirundo rustica); Swift (Apus apus); Tree Sparrow (Passer montanus); Turnstone (Arenaria interpres); Velvet Scoter (Melanitta fusca); Water Rail (Rallus aquaticus); Willow Warbler (Phylloscopus trochilus); Woodpigeon (Columba palumbus); Yellowhammer (Emberiza citrinella)</i>

Mitigation

The survey area within the survey area is of low importance to the local breeding bird population. However, the impact of the development during construction phase will be a loss of existing habitats and species. The following mitigation measures relevant to birds, as well as those outlined within the accompanying NIS and EIAR, shall be implemented to minimise any potential negative impact on biodiversity:

- Relevant guidelines and legislation (Section 40 of the Wildlife Acts, 1976 to 2012) in relation to the removal of trees and timing of nesting birds will be followed e.g. do not remove trees or shrubs during the nesting season (1st March to 31st August). Should this not be possible, vegetation will be inspected by an ecologist for nesting birds prior to removal.
- Barn swallows are noted nesting on site. Demolition of all buildings on site and the timing of works will be subject to approval of the project ecologist. If nesting barn swallows are on site and works will be carried out within the bird nesting season, NPWS will be consulted prior to works commencing within 20m of the buildings and no works will proceed without the formal approval of NPWS.
- 20 x 10B Schwegler Swallow Nests will be placed in the vicinity of the built structures to the north of the site in the location of the existing barn, in consultation with and subject to the approval of the project ecologist.
- Replanting and the generation of additional perimeter hedgerows around the housing development will create compensatory nesting habitats for passerine species such as yellowhammer. 20 x bird boxes will also be placed in suitable areas throughout the site to the approval of the project ecologist to create nesting habitats for local bird populations. Open space areas (particularly west of the site) will also create potential nesting habitats for meadow pipit and hunting grounds for kestrels.

Conclusion

This report presents the results of three site visits by Frank Spellman on the 22nd April, 9th May and 22nd May 2025. A breeding bird transect survey was carried out on each occasion. The surveys comply with bird survey guidance documentation including BTO Common Bird Census (Bibby *et al.*, 2000 and Gilbert *et al.*, 1998) following CIEEM guidelines. Weather conditions were favourable on each occasion.

A total of 24 species were recorded within the overall survey area across three surveys. 17 species were recorded breeding or displaying behaviour indicative of breeding within the survey area.

11 green-listed bird species of conservation concern were recorded breeding within the survey area; blackbird, blackcap, blue tit, chaffinch, dunnock, goldfinch, hooded crow, robin, song thrush, woodpigeon and wren.

Five amber-listed bird species of conservation concern were recorded breeding within the survey area; herring gull, house sparrow, linnet, starling and swallow.

One red-listed bird species of conservation concern was recorded breeding within the survey area; yellowhammer.

Four hotspots of breeding activity were identified, two in the north (treeline/hedgerow and agricultural buildings), one in the centre (hedgerow) and one in the east (treeline/scrub) within the survey area.

The proposed development is predicted to have a Low adverse / site / Negative Impact / Not significant / long term on breeding birds within the proposed area. The additional planting and retention of a significant proportion of the existing mature trees/treelines within the landscape strategy should facilitate the perseverance of species breeding within the site.

Mitigation measures are proposed.

References

- Bibby, C.J., Burgess, N.D., Hill, D.A. & Mustoe, S.H. (2000)** Bird Census Techniques. Academic Press, London
- Bird Survey & Assessment Steering Group. (2022).** Bird Survey Guidelines for assessing ecological impacts, v.1.0.0. <https://birdsurveyguidelines.org> [15/05/2023]
- Chartered Institute of Ecology and Environmental Management (2018).** *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal, and Marine*. Chartered Institute of Ecology and Environmental Management, Winchester.
- Collated by the National Biodiversity Data Centre from different sources, General Biodiversity Records from Ireland**, National Biodiversity Data Centre, Ireland, accessed 17 October 2023, <<https://maps.biodiversityireland.ie/Dataset/7>>
- Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention) 1982**
- Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention) 1979**
- Department of Housing, Planning and Local Government (December, 2018).** *Urban Development and Building Heights Guidelines for Planning Authorities*.
- EC Directive on The Conservation of Natural habitats and of Wild Fauna and Flora (Habitats Directive) 1992**
- EU Directive on the Conservation of Wild Birds 2009**
- Gilbert, G., Gibbons, D.W., & Evans, J. (1998)** Bird Monitoring Methods: A Manual of Techniques for UK Key Species. The Royal Society for the protection of Birds, Sandy, Bedfordshire, England.
- Gilbert G, Stanbury A and Lewis L (2021)**, "Birds of Conservation Concern in Ireland 2020 –2026". Irish Birds 9: 523—544
- Wildlife Act 1976 and Wildlife [Amendment] Act 2000.** Government of Ireland.



RECEIVED: 18/12/2025

Wintering Bird Assessment for a proposed development at Flemington South, Balbriggan, Co. Dublin



16th December 2025

Prepared by: Frank Spellman of Altemar Ltd.

On behalf of: Glenveagh Homes Limited

Altemar Ltd., 50 Templecarrig Upper, Delgany, Co. Wicklow. 00-353-1-2010713. info@altemar.ie

Directors: Bryan Deegan and Sara Corcoran

Company No.427560 VAT No. 9649832U

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Document Control Sheet			
Client	Glenveagh Homes Limited		
Project	Wintering Bird Assessment at Flemington South, Balbriggan, Co. Dublin		
Report	Wintering Bird Assessment		
Date	16 th December 2025		
Version	Author	Reviewed	Date
01	Frank Spellman	Jack Doyle	26 th August 2025
Final	Frank Spellman	Jack Doyle & Bryan Deegan	16 th December 2025

RECEIVED: 18/12/2025

SUMMARY

Structure / features:	The survey area consists of arable crops with grassland, recolonising bare ground, dry meadows and grassy verges, derelict structures and hedgerows.
Location:	Lands at Flemington, Balbriggan, Co. Dublin.
Bird species present:	Blackbird, black-headed gull, blue tit, brent goose, buzzard, chaffinch, collared dove, common gull, dunnoek, feral pigeon, goldfinch, great tit, greenfinch, herring gull, hooded crow, house sparrow, jackdaw, kestrel, linnet, meadow pipit, mistle thrush, pheasant, robin, rook, skylark, song thrush, sparrowhawk, starling, woodpigeon, wren, yellowhammer.
Proposed work:	Residential Development.
Surveys by:	Frank Spellman and Jack Doyle
Survey date:	22 nd /29 th October 2024, 19 th /22 nd November 2024, 3 rd /10 th December 2024, 22 nd /28 th January 2025, 6 th /23 rd February 2025, 5 th /11 th March 2025.

Competency of assessor

Since its inception in 2001, Altamar has been delivering ecological and environmental services to a broad range of clients. Operational areas include: residential; infrastructural; renewable; oil & gas; private industry; Local Authorities; EC projects; and, State/semi-State Departments.

Bryan Deegan (MCIEEM, BSc Applied Marine Biology, MSc Environmental Science)

Bryan Deegan, the managing director of Altamar, is an Environmental Scientist and Marine Biologist with 30 years' experience working in Irish terrestrial and aquatic environments, providing services to the State, Semi-State and industry. He is currently lead project ecologist for Project Pembroke and was contracted to Inland Fisheries Ireland as the sole "External Expert" to environmentally assess internal and external projects. He is also chair of an internal IFI working group on environmental assessment. Bryan Deegan (MCIEEM) holds a MSc in Environmental Science, BSc (Hons.) in Applied Marine Biology, NCEA National Diploma in Applied Aquatic Science and a NCEA National Certificate in Science (Aquaculture).

Frank Spellman (BSc Zoology, MSc Zoology).

This report has been prepared by Frank Spellman. Frank has extensive experience in carrying out a wide range of fauna surveys as both a sub-contractor and employee for environmental consultancies and organisations in Ireland and the US. These include both roving and static acoustic bat surveys, terrestrial non-avian mammal surveys, breeding/wintering bird surveys, and freshwater ecology surveys. Frank has been lead ornithologist on numerous development projects within Ireland carrying out full wintering bird and breeding bird assessments.

Jack Doyle (MSc Sustainable Environments)

This report has been contributed to by Jack Doyle (MSc Sustainable Environments). Jack has previous experience in carrying out a wide range of fauna surveys, including both roving and static acoustic bat surveys, terrestrial non-avian mammal surveys, and breeding/wintering bird surveys.

Legislative context

The Wildlife Act 1976 protects wild birds in Ireland. Based on this legislation it is an offence to wilfully interfere with or destroy wild birds and their nests and eggs (other than the wild species mentioned in the Third Schedule of this Act). Under this legislation it is an offence for any person who "*wilfully takes or removes the eggs or nest of a protected wild bird otherwise than under and in accordance with such a licence, wilfully destroys, injures or mutilates the eggs or nest of a protected wild bird, wilfully disturbs a protected wild bird on or near a nest containing eggs or unflown young.*"

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- deliberately captures or kills any specimen of these species in the wild,
- deliberately disturbs these species particularly during the period of breeding, rearing, hibernation and migration,
- deliberately takes or destroys eggs of those species from the wild,
- damages or destroys a breeding site or resting place of such an animal, or
- keeps, transports, sells, exchanges, offers for sale or offers for exchange any specimen of these species taken in the wild, other than those taken legally as referred to in Article 12(2) of the Habitats Directive, shall be guilty of an offence.

Description of the Proposed Project

The development will consist of the construction of 815 no. dwellings (610 no. houses, 194 apartments & 11 no. later living dwellings), a portion of the C-Ring Road, open space, community building/retail floorspace and 2 no. creches as follows:

- A) Demolition of existing single storey dwelling (c. 154 sq. m) and agricultural outbuilding (c. 366 sq. m) located to the south of Flemington Lane;
- B) Provision of portion of '*C-Ring Road*' from Flemington Lane [to include junctions and ancillary footpaths, cycle paths, lighting, bus stops, boundary wall to adjoining owner, and tie in to existing roads/agricultural access points] to link into the existing R122 roundabout with vehicular access also from the Boulevard Road, Hamlet Lane, & Flemington Lane along with associated amendments to the layout of the Local Road L1130 (also known as the Clonard Road including the creation of a cul de sac arrangement to the south of the C-Ring Road); the provision of car parking spaces (1,037 no.), bicycle parking spaces (1,144 no.) and all internal roads and footpaths and bicycle and bin stores, & substations;
- C) Provision of a community pavilion (2 storeys) comprising community floorspace of c. 730 sq. m (with flexible internal spaces) along with a retail unit (c. 419 sq. m) at ground floor of apartment Block F as well as 2 no. 2 storey creches c. 530 sq. m each with ancillary parking and open space areas;
- D) 610 no. terraced, semi-detached & detached houses comprising 318 no. 2-bedroom houses (2 storey), 254 no. 3-bedroom houses (2 storey) and 38 no. 4-bedroom houses [house types B1/F4/F5 with variants] 3 storeys;
- E) 194 no. apartments in 5 no. apartment buildings (52 no. studio apartments, 87 no. 1 bedroom apartments, 51 no. 2 bedroom apartments and 4 no. 3 bedroom apartments - all apartments with terrace or balcony on elevations) as follows: Block A [4 storeys & 64 no. apartments] comprising 47 no. 1 bedroom apartments and 17 no. 2 bedroom apartments; Block C, [Part 3-4 storeys & 18 no. apartments] comprising 10 no. 1 bedroom apartments, 6 no. 2 bedroom apartments & 2 no. 3 bedroom apartments; Block F [Part 4-5 storeys & 48 no. apartments] comprising 36 no. 1 bedroom apartments and 12 no. 2 bedroom apartments; Block G [Part 3-4 storeys & 40 no. apartments]; comprising 30 no. 1 bedroom apartments and 10 no. 2 bedroom apartments; Block H [part 3-4 storeys & 24 no. apartments] comprising 16 no. 1 bedroom apartments, 6 no. 2 bedroom apartments & 2 no. 3 bedroom apartments;
- F) 11 no. single storey 2 bedroom later living houses with associated communal open space;
- G) 5.26 hectares of open space comprising Class 1 Open Space (c. 2.39 hectares in the western separate parcel of land), Public open space c.2.87 hectares, hard and soft landscaping (including public lighting & boundary treatment, ESB substations, bicycle and bin stores) and communal/semi-private open space for the proposed apartment units;
- H) Provision of surface water attenuation measures, connection to water supply, provision of foul drainage infrastructure (and Uisce Eireann diversion) to Uisce Eireann specifications and all ancillary site development, construction, and landscaping works including reprofiling of the site where required;
- I) The proposals will replace the previously permitted LRD under planning reg. ref. LRD0006/S3 & ACP Ref: 319343-24.

The survey area is demonstrated in Figure 1.

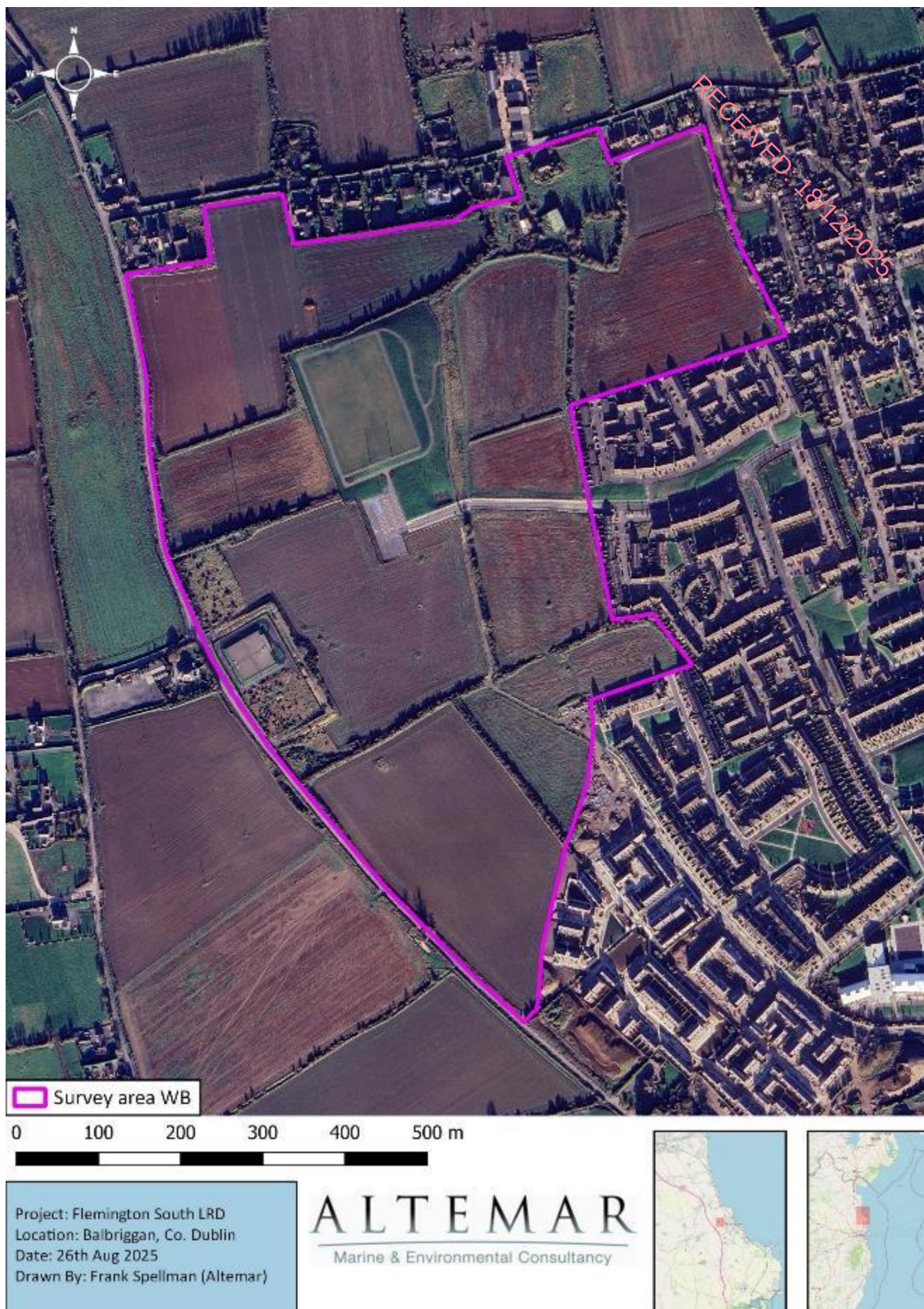


Figure 1. Wintering bird survey area.



Figure 2. Wintering bird survey area location.

Wintering bird surveys

This report presents the methodology and results of 12 visits to lands at Flemington, Balbriggan, Co. Dublin by Frank Spellman and Jack Doyle from October 2024 to March 2025.

Survey methodology

Wintering bird surveys were carried out over the entire wintering bird season on lands at Flemington, Balbriggan, Co. Dublin in order to gather baseline data to assist in assessing the potential impacts on wintering birds from future proposed developments on the site, in particular those listed as Qualifying Interests of SPAs within 15 km and other amber/red-listed birds of conservation concern in Ireland (BoCCI). Potential impacts on wintering bird species include disturbance, destruction of foraging areas, destruction of roosting areas and collision risk during construction and operation (cranes, buildings etc.). These wintering bird surveys were carried out based on the BTO Common Bird Census (Bibby *et al.*, 2000 and Gilbert *et al.*, 1998) and I-WeBS Counter Manual: Guidelines for Irish Wetland Bird Survey counters (BWI & NPWS), following CIEEM guidelines.

A 15-minute settlement period was given following arrival to allow resumption of bird activity after any possible disturbance caused by arrival to the site. Various features such as grassland, hedgerows, treelines, agricultural fields, scrub and amenity grassland were present within the survey area. A roving transect survey around the perimeter was carried out on each occasion, providing clear views of all areas within and over that survey area. Any observed behaviour by wintering bird species and other relevant species (birds of prey, red-listed BoCCI etc.) observed within, over and immediately adjacent to the survey area were recorded. The presence of all other bird species (e.g. passerine) was also recorded. Each survey was carried out by a single surveyor.

A pair of binoculars were used by the surveyor to identify and count birds at distance.

Care was taken not to double count any observations. Surveys were initiated at varying times (morning/midday/afternoon) and at low tide levels on both incoming and outgoing tides when bird activity and birds transiting to/from foraging and roosting areas was at its highest. Local temperatures varied from 4 – 8°C. Winds varied from 1 – 2 on the Beaufort scale. Weather conditions were suitable on all occasions.

Peak counts for the survey area were compared to 1% national and international population sizes of relevant species for which data was available. Foraging areas, flight paths, large flights and other observations were mapped according to field sheet records.

Survey Results/discussion

Habitats of wintering bird potential

A desk and ground level wintering bird habitat assessment were carried and used to examine the structures, features and vegetation on site that could provide wintering bird habitat. Potential features associated with foraging/roosting include agricultural fields, improved/amenity grassland, scrub, watercourses and drainage ditches, estuaries and intertidal zones. All open areas, vegetated areas, built areas and water-holding features within and immediately adjacent to the site were assessed for wintering bird potential.

Habitat of foraging value for wintering birds was present throughout the site. The site and its surroundings consisted mainly of arable crops with grassland, recolonising bare ground, dry meadows and grassy verges, derelict structures and hedgerows.

The site is in close proximity (1.5 km) from North-West Irish Sea SPA, and so there is a high potential for Qualifying Interests of this SPA to utilise and/or fly over the site.

Wintering bird activity survey

A total of 31 species were recorded within, above and adjacent to the survey area across 12 surveys. 19 green, nine amber and three red species of conservation concern were recorded either within, over and adjacent to the overall survey area. Details regarding the status, behaviour and abundances of species recorded on/over/adjacent to the site relevant to the conservation interests of Special Protected Areas (SPAs) and red listed Birds of Conservation Concern in Ireland (BoCCI) are discussed below.

Black-headed gull (amber BoCCI) was observed in flight over the survey area during five surveys (figure 5). This species was recorded foraging in a field west of the survey area on one occasion (figure 7). A total of 17 observations of black-headed gull were made of a total of 49 individuals. This species was only observed foraging within the survey area when harvesting was taking place within the agricultural fields. Agricultural fields area abundant throughout the greater area surrounding the site and are likely selective of sites being disturbed by active farming for foraging, as well as within the nearby marine environment. No particular pattern was identified by flight paths. Peak count was 22 individuals. This species is a Qualifying Interest of the nearby North-West Irish Sea SPA. The peak number is below 1% of the international population (table 2).

Common gull (amber BoCCI) was observed flying over the survey area on two occasions during one survey, totalling two individuals (Figure 6). Peak count was 2 individuals. This species is a Qualifying interest for the nearby North-West Irish Sea SPA. The peak number is below 1% of the international population (table 2).

Herring gull (amber BoCCI) was observed in flight over within the survey area during 12 surveys (figures 3 and 4). A total of 131 observations of herring gull were made of a total of 432 individuals. This species was only observed foraging on two instances on exposed earth within the survey area. No particular pattern was discerned from individual flight paths, however, large flights of Herring Gull typically circled above houses in the residential development along the eastern boundary of the survey area (Figure 4). Peak count was 119 individuals. This species is a Qualifying Interest of the nearby North-West Irish Sea SPA. The peak number is below 1% of the international population (table 2).

Kestrel (red BoCCI) was observed hunting over the survey area during three surveys (Figures 6 & 7). A total of 3 observations of kestrel were made, totalling 1 no. individuals in each instance. This is likely the same individual kestrel recorded over multiple surveys. This kestrel was observed hovering over the dry meadow grassland within the overall survey area.

Light-bellied Brent Goose (amber BoCCI) was observed in flight at a height of 200m over the survey area during one survey (figure 6). A total of 1 observations of brent goose were made of a total of 5 individuals. This species was not observed foraging within the survey area, although likely forages on agricultural grassland and amenity grassland in the greater area, as well as the estuarine/intertidal environment to the south/north. Peak count was 5 individuals. The peak number is below 1% of the national and international populations (table 2).

Meadow pipit (red BoCCI) was observed foraging within the survey area during one survey (Figure 7). Peak count was 5 individuals. This species was primarily recorded foraging within the dry grassy meadow grassland habitat in the centre of the survey area. Given that 5 individual meadow pipits were recorded once across 12 surveys, the survey area is not considered to be of significance to this species.

Yellowhammer (red BoCCI) was observed foraging within the survey area during one survey (Figure 7). A total of 2 observations of yellowhammer were made, totalling 1 no. individuals. This individual yellowhammer was observed proximate to a hedgerow dissecting the centre of the survey area.

Table 1. Species recorded within, above and/or immediately adjacent to the survey area.

Common name	BTO	Latin name	BoCCI
Blackbird	B.	<i>Turdus merula</i>	Green
Black-headed Gull	BH	<i>Larus ridibundus</i>	Amber
Blue Tit	BT	<i>Cyanistes caeruleus</i>	Green
Brent Goose	BG	<i>Branta bernicla hrota</i>	Amber
Buzzard	BZ	<i>Buteo buteo</i>	Green
Chaffinch	CH	<i>Fringilla coelebs</i>	Green
Collared Dove	CD	<i>Streptopelia decaocto</i>	Green
Common Gull	CM	<i>Larus canus</i>	Amber
Dunnock	D.	<i>Prunella modularis</i>	Green
Feral Pigeon	FP	<i>Columba livia f. domestica</i>	Green
Goldfinch	GO	<i>Carduelis carduelis</i>	Green
Great Tit	GT	<i>Parus major</i>	Green
Greenfinch	GR	<i>Chloris chloris</i>	Amber
Herring Gull	HG	<i>Larus argentatus</i>	Amber
Hooded Crow	HC	<i>Corvus cornix</i>	Green
House Sparrow	HS	<i>Passer domesticus</i>	Amber
Jackdaw	JD	<i>Corvus monedula</i>	Green
Kestrel	K.	<i>Falco tinnunculus</i>	Red
Linnet	LI	<i>Carduelis cannabina</i>	Amber
Meadow Pipit	MP	<i>Anthus pratensis</i>	Red
Mistle Thrush	M.	<i>Turdus viscivorus</i>	Green
Pheasant	PH	<i>Phasianus colchicus</i>	Green
Robin	R.	<i>Erithacus rubecula</i>	Green
Rook	RO	<i>Corvus frugilegus</i>	Green
Skylark	S.	<i>Alauda arvensis</i>	Amber
Song Thrush	ST	<i>Turdus philomelos</i>	Green
Sparrowhawk	SH	<i>Accipiter nisus</i>	Green
Starling	SG	<i>Sturnus vulgaris</i>	Amber
Woodpigeon	WP	<i>Columba palumbus</i>	Green
Wren	WR	<i>Troglodytes troglodytes</i>	Green
Yellowhammer	Y.	<i>Emberiza citrinella</i>	Red

Table 2. Peak counts of bird species recorded within, above and/or immediately adjacent to the survey area.

Species	Peak count (2024/25)	1% national	1% international
Blackbird	6		
Black-headed Gull	22		>10,000
Blue Tit	3		
Brent Goose	5	350	400
Buzzard	3		
Chaffinch	4		
Collard Dove			
Common Gull	2		>10,000
Duncock	5		
Feral Pigeon	42		
Goldfinch	3		
Great Tit	1		
Greenfinch	17		
Herring Gull	119		>1000
Hooded Crow	12		
House Sparrow	17		
Jackdaw	36		
Kestrel	1		
Linnet	42		
Meadow Pipit	5		
Mistle Thrush	6		
Pheasant	4		
Robin	3		
Rook	14		
Skylark	8		
Song Thrush	5		
Sparrowhawk	1		
Starling	60		
Woodpigeon	200		
Wren	3		
Yellowhammer	1		



Figure 3. Herring gull flight paths.

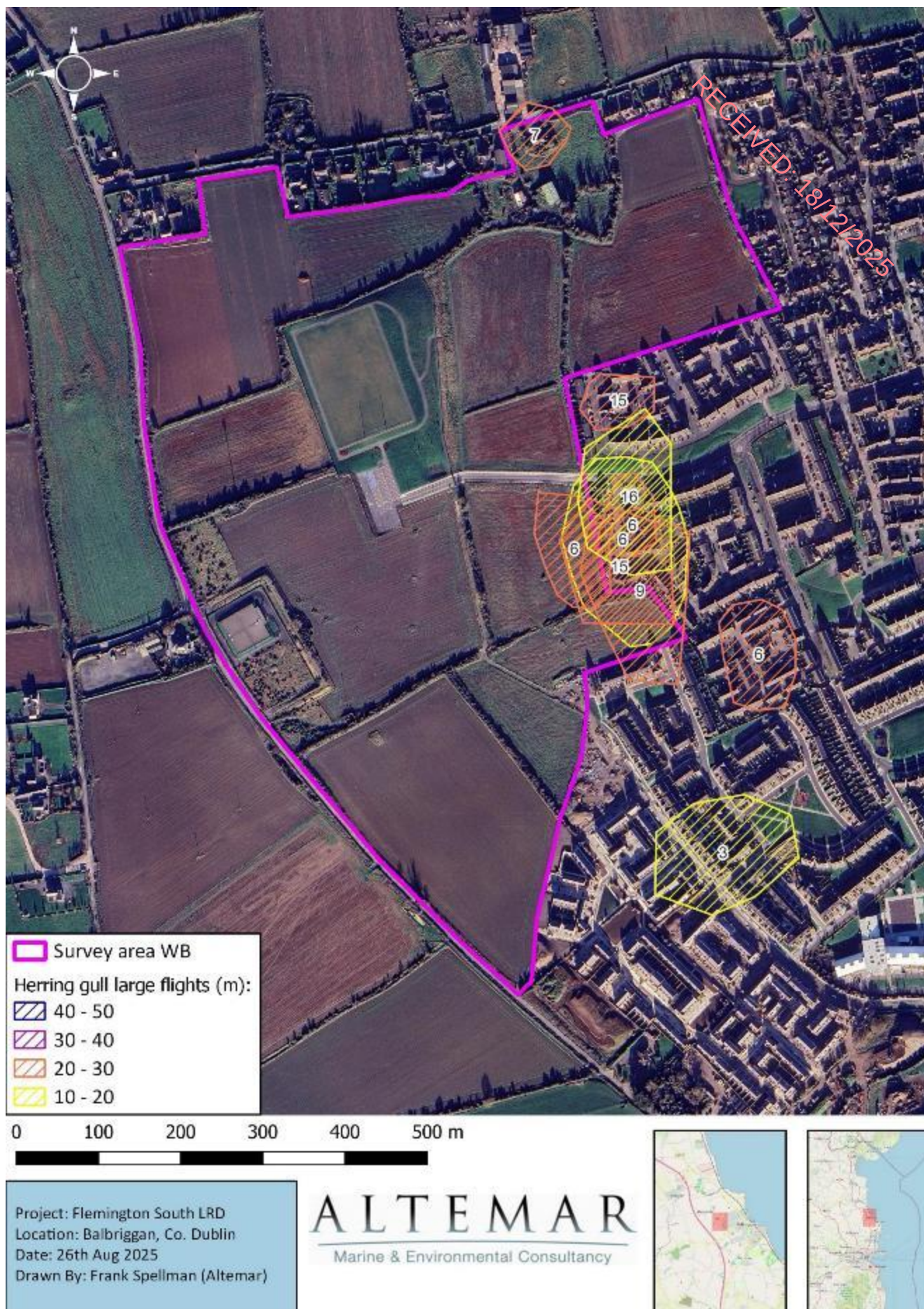


Figure 4. Herring gull large flights

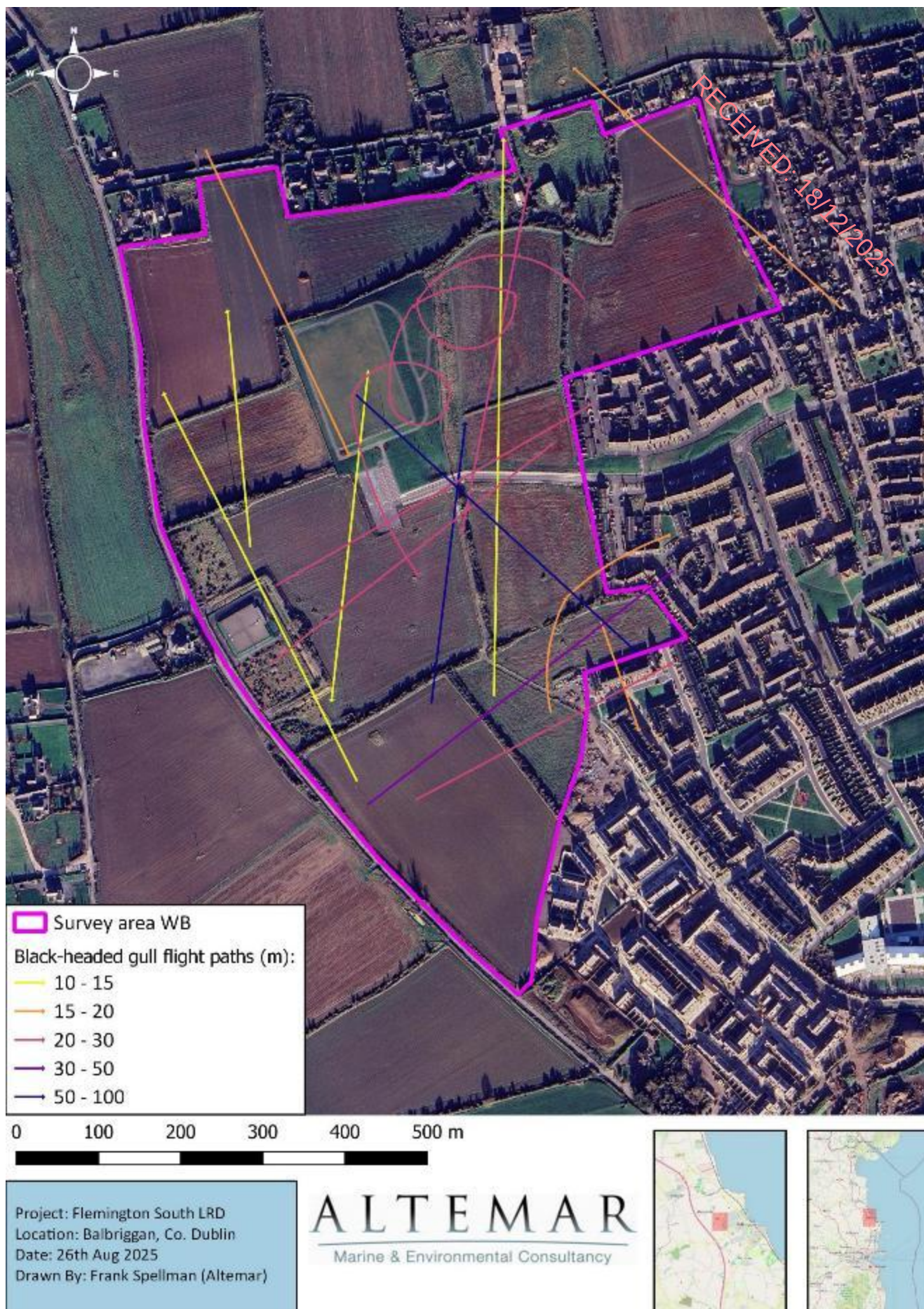


Figure 5. Black-headed gull flight paths.

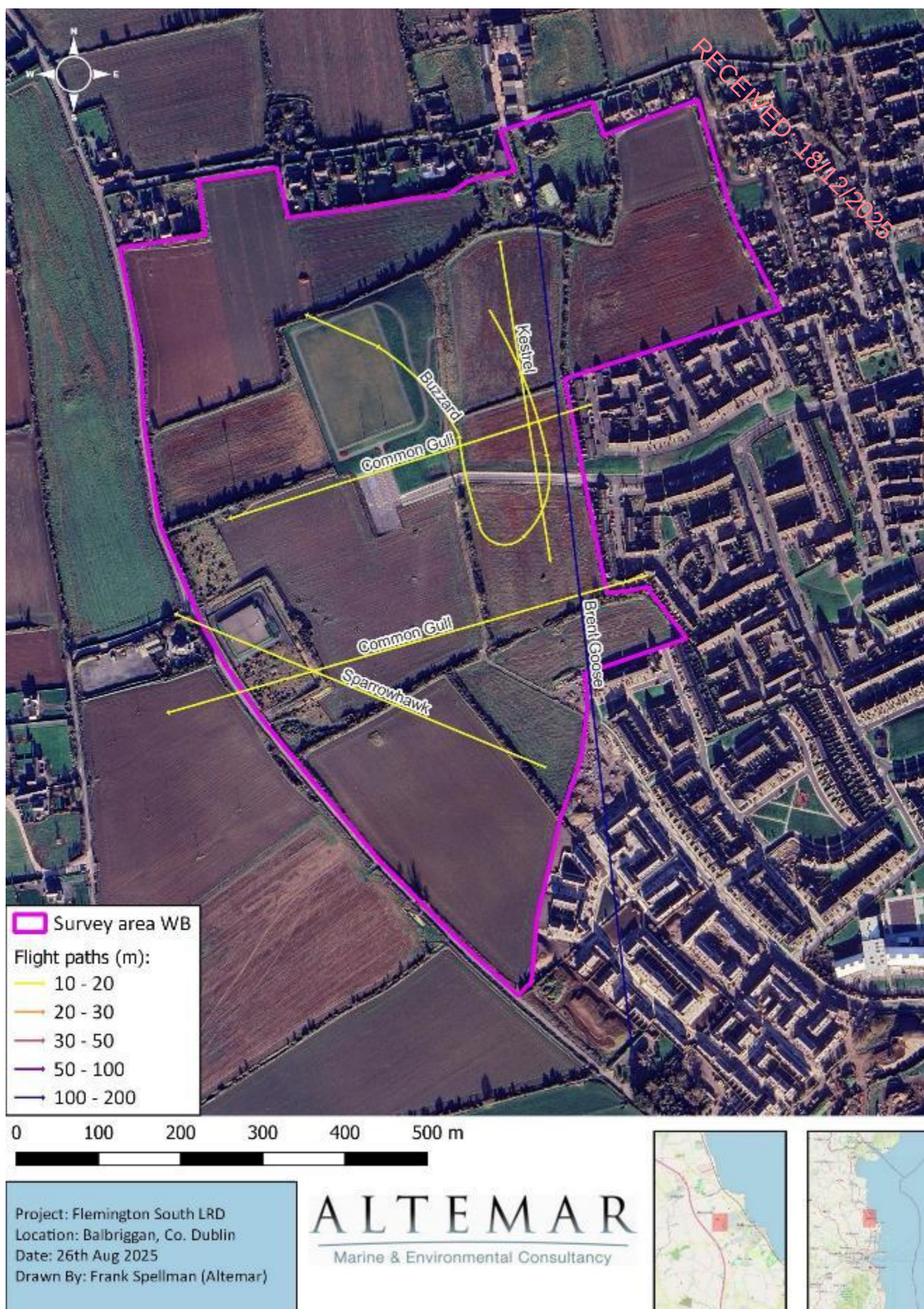


Figure 6. Flight paths for other species.

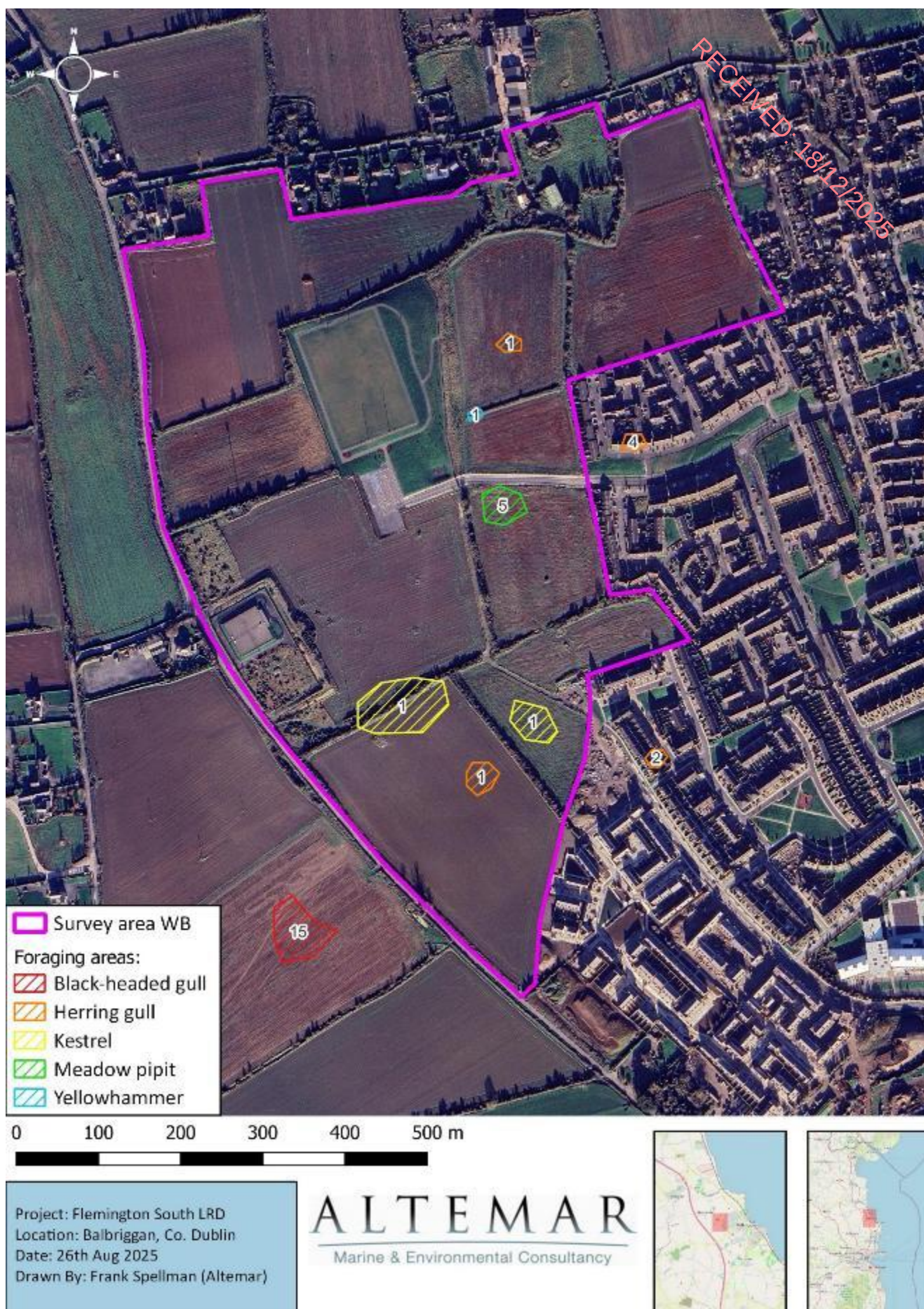


Figure 7. Foraging areas.



Figure 8. Species observed perched/resting within or adjacent to the survey area.

Wintering bird assessment findings

Review of local bird records

The review of existing bird records (sourced from NBDC Database) within a 2 km² grid (Reference grid O16W) encompassing the study area reveals that 35 known bird species have previously been observed and recorded locally (Table 3).

Table 3: NBDC bird records within 2 km² (grids O17F)

Species Name	Record Count	Date of Last Record	Dataset
Barn Owl (<i>Tyto alba</i>)	1	29/08/2018	Birds of Ireland
Blackbird (<i>Turdus merula</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Blue Tit (<i>Cyanistes caeruleus</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Bullfinch (<i>Pyrrhula pyrrhula</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Buzzard (<i>Buteo buteo</i>)	2	18/05/2018	Birds of Ireland
Chaffinch (<i>Fringilla coelebs</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Collared Dove (<i>Streptopelia decaocto</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Curlew (<i>Numenius arquata</i>)	1	01/02/2024	Birds of Ireland
Dunnock (<i>Prunella modularis</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Goldfinch (<i>Carduelis carduelis</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Great Tit (<i>Parus major</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Herring Gull (<i>Larus argentatus</i>)	2	31/12/2011	Bird Atlas 2007 - 2011
Hooded Crow (<i>Corvus cornix</i>)	1	07/05/2018	Birds of Ireland
House Sparrow (<i>Passer domesticus</i>)	2	31/12/2011	Bird Atlas 2007 - 2011
Jackdaw (<i>Coloeus monedula</i>)	2	31/12/2011	Bird Atlas 2007 - 2011
Killdeer (<i>Charadrius vociferus</i>)	1	12/01/1928	Rare birds of Ireland
Linnet (<i>Linaria cannabina</i>)	1	07/05/2018	Birds of Ireland
Long-tailed Tit (<i>Aegithalos caudatus</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Magpie (<i>Pica pica</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Mistle Thrush (<i>Turdus viscivorus</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Peregrine (<i>Falco peregrinus</i>)	1	16/04/2021	Birds of Ireland
Pheasant (<i>Phasianus colchicus</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Redwing (<i>Turdus iliacus</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Reed Bunting (<i>Emberiza schoeniclus</i>)	1	07/05/2018	Birds of Ireland
Robin (<i>Erithacus rubecula</i>)	2	06/05/2018	Birds of Ireland
Rock Dove (<i>Columba livia</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Rook (<i>Corvus frugilegus</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Skylark (<i>Alauda arvensis</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Song Thrush (<i>Turdus philomelos</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Sparrowhawk (<i>Accipiter nisus</i>)	1	06/02/2016	Birds of Ireland
Starling (<i>Sturnus vulgaris</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Swift (<i>Apus apus</i>)	1	19/05/2018	Birds of Ireland
Woodpigeon (<i>Columba palumbus</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Wren (<i>Troglodytes troglodytes</i>)	1	31/12/2011	Bird Atlas 2007 - 2011
Yellowhammer (<i>Emberiza citrinella</i>)	2	22/07/2018	Birds of Ireland

Historical Surveys

I-WeBS

I-WeBS National and Site Trends Report 1994/95 – 2019/20 report presents national and site-specific trends of wetland birds in Ireland. This report was used to assess the trends of species recorded during wintering bird surveys at Flemington South in winter of 2024/25. The survey area is proximate to Skerries Coast (OU904) and Nanny Estuary and Shore (OV401) I-WeBS sites.

Brent goose was the only species considered by I-WeBS recorded during wintering bird surveys at Flemington South over the 2024/25 season. The Brent goose national population is considered to be stable and/or increasing.

At both Skerries Coast and Nanny Shore and Estuary, the brent goose population is considered to be stable or increasing.

The national wetland bird trend summary (figure 9) provides long-term population trends for wintering species in Ireland. Trends for species nationally, and Skerries Coast and Nanny Shore and Estuary, are included in Appendix 4.3a-4.3e.

National Summary

Species	Trend (%)			Long Term Trend
	National - 5 Year	National - 12 Year	National - 25 Year	
Scaup	-33.6	-82.9	-89.2	Large Decline
Pochard	-19.8	-60.4	-79.1	Large Decline
Goldeneye	-32.5	-39.0	-66.9	Large Decline
Lapwing	-6.5	-45.1	-63.9	Large Decline
Gray Plover	-30.6	-39.4	-57.8	Large Decline
Golden Plover	-16.9	-58.1	-54.1	Large Decline
Dunlin	5.9	-21.2	-45.2	Moderate Decline
Curtlew	-9.4	-23.7	-43.1	Moderate Decline
Turnstone	-33.6	-46.0	-23.7	Intermediate Decline
Coot	-10.1	1.1	-23.2	Intermediate Decline
Mallard	-11.3	-19.7	-19.1	Intermediate Decline
Wigeon	0.9	-17.0	-18.2	Intermediate Decline
Tufted Duck	-20.7	-28.9	-17.9	Intermediate Decline
Red-breasted Merganser	-12.9	5.2	-14.7	Intermediate Decline
Pintail	-0.8	-6.0	-13.7	Intermediate Decline
Great Crested Grebe	-39.5	-6.1	-10.8	Intermediate Decline
Shoveler	23.0	-21.3	-10.8	Intermediate Decline
Knot	0.0	-12.2	-9.8	Intermediate Decline
Bar-tailed Godwit	-32.6	-13.9	-5.1	Intermediate Decline
Ringed Plover	-4.3	-26.8	-1.1	Intermediate Decline
Gray Heron	1.0	-4.9	6.6	Stable or Increasing
Redshank	-14.0	-28.4	6.7	Stable or Increasing
Shelduck	6.3	-0.8	9.3	Stable or Increasing
Oystercatcher	-17.5	-31.1	10.8	Stable or Increasing
Mute Swan	4.6	9.6	13.8	Stable or Increasing
Teal	1.8	5.7	19.4	Stable or Increasing
Purple Sandpiper	-36.4	-37.6	23.5	Stable or Increasing
Gadwall	-26.5	4.3	24.4	Stable or Increasing
Little Grebe	6.1	16.7	38.2	Stable or Increasing
Greenshank	0.9	7.3	41.0	Stable or Increasing
Cormorant	38.5	8.4	42.9	Stable or Increasing
Sanderling	-23.8	-11.1	84.6	Stable or Increasing
Black-tailed Godwit	22.5	25.0	92.3	Stable or Increasing
Light-bellied Brant Goose	-11.2	1.2	93.3	Stable or Increasing
Little Egret	34.6	61.5	483.3	Stable or Increasing

Figure 9. I-WeBS National Trends Report.

Conclusion

This report aims to build on the baseline data and provide information to assist in assessing the potential impact of the proposed development on wintering birds within/over/adjacent to the development area. This report presents the methodology and results of 12 visits to this location by Altamar Ltd. from October 2024 to March 2025.

A total of 31 species were recorded within, above and adjacent to the survey area across 12 surveys. 19 green, nine amber and three red species of conservation concern were recorded either within, over and adjacent to the overall survey area. Red listed species recorded within the survey area included kestrel, meadow pipit, and yellowhammer. Meadow pipit and redwing were recorded foraging throughout the survey area. 3 species listed as Qualifying Interests of North-West Irish Sea SPA were recorded: black-headed gull, common gull and herring gull. It should be noted that a single instance of 5 no. brent geese were observed flying over the subject site at a height of 200m.

The proposed residential development is predicted to reduce available foraging areas for wintering birds, in particular those listed as Qualifying Interests (QI) of nearby SPAs. However, no bird species protected as QIs of proximate SPAs were recorded foraging within the survey area during any of the 12 site surveys between October 2024 – March 2025. Further, the reduction in foraging and potential roosting areas are not significant in the context of the wider area available to species of relevance due to the widespread and abundant habitats of comparable suitability. As a result, no significant impacts on wintering bird species foraging and moving between foraging/roosting sites are likely in the absence of mitigation measures. No significant impact on species listed as QIs of any European Site or bird species of conservation interest are predicted.

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Site Summary

Species	Trend (%)			Long Term Trend
	Skerries Coast - 5 Year	Skerries Coast - 12 Year	Skerries Coast - 23 Year	
Lapwing	-9.1	-42.0	-79.2	Large Decline
Turnstone	-50.6	-62.4	-49.1	Moderate Decline
Redshank	-32.2	-36.6	-4.9	Intermediate Decline
Oystercatcher	-42.3	-41.7	-1.7	
Curlew	-8.1	-12.5	19.7	Stable or Increasing
Sanderling	-53.9	-34.3	22.4	
Ringed Plover	12.2	-27.2	40.7	
Cormorant	0.0	36.6	96.5	
Light-bellied Brent Goose	-37.1	6.8	110.8	
Dunlin	175.0	120.0	144.4	

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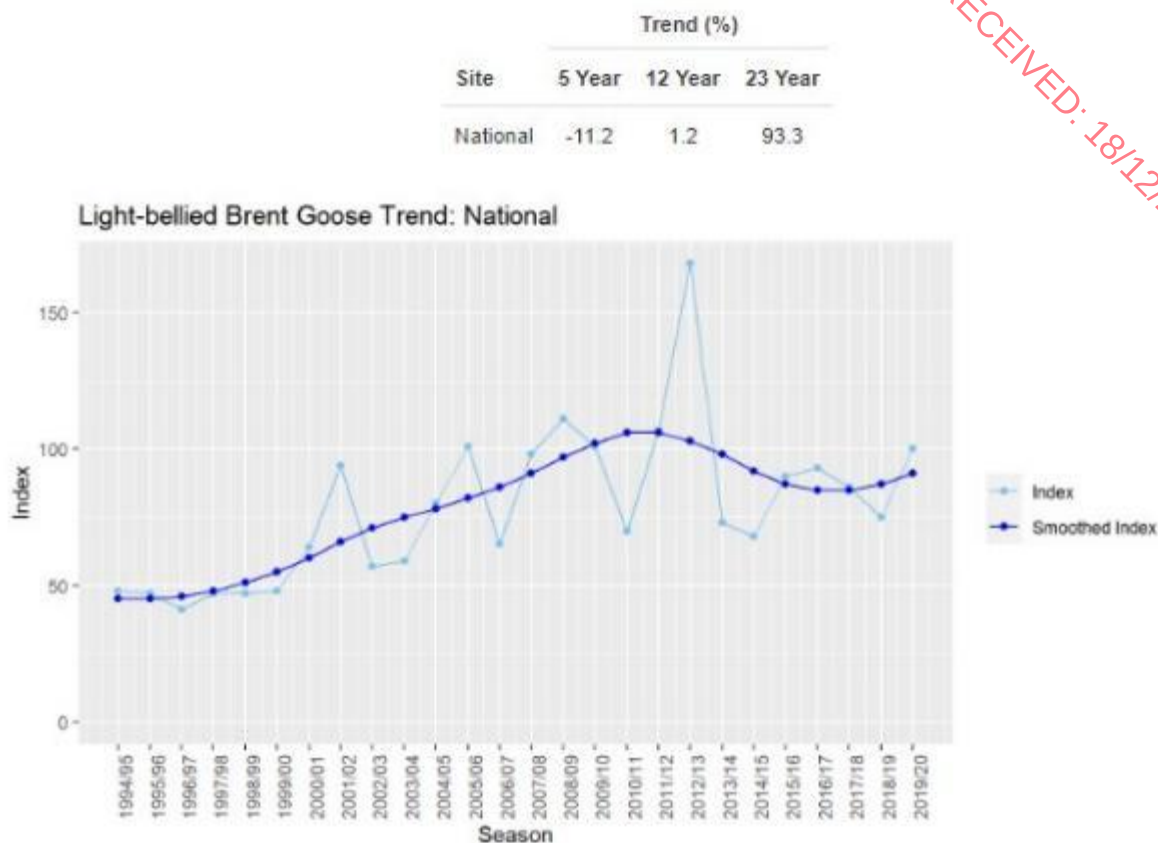
Site Summary

Species	Trend (%)			Long Term Trend
	Nanny Estuary & shore - 5 Year	Nanny Estuary & shore - 12 Year	Nanny Estuary & shore - 23 Year	
Golden Plover	-35.3	-75.7	-85.9	Large Decline
Cormorant	-32.1	-90.6	-81.1	
Bar-tailed Godwit	-71.6	-78.8	-75.9	
Grey Plover	-58.5	-80.1	-75.1	
Dunlin	-59.7	-51.2	-44.3	Moderate Decline
Turnstone	-50.0	-74.5	-43.6	
Sanderling	-75.3	-71.4	-29.5	
Lapwing	118.6	-11.3	-29.3	
Ringed Plover	-50.0	-68.3	-23.2	Intermediate Decline
Mallard	34.5	-35.1	-6.3	
Oystercatcher	32.3	-45.6	28.4	Stable or Increasing
Curlew	9.7	-32.0	47.8	
Knot	32.1	-75.2	76.2	
Light-bellied Brent Goose	-42.3	-48.6	133.3	
Redshank	-15.7	-26.3	311.8	
Teal	40.0	157.9	1533.3	
Black-tailed Godwit	27.4	116.1	1916.7	

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Appendix 4.3c – I-WeBS National Trends of relevant species recorded in this report.

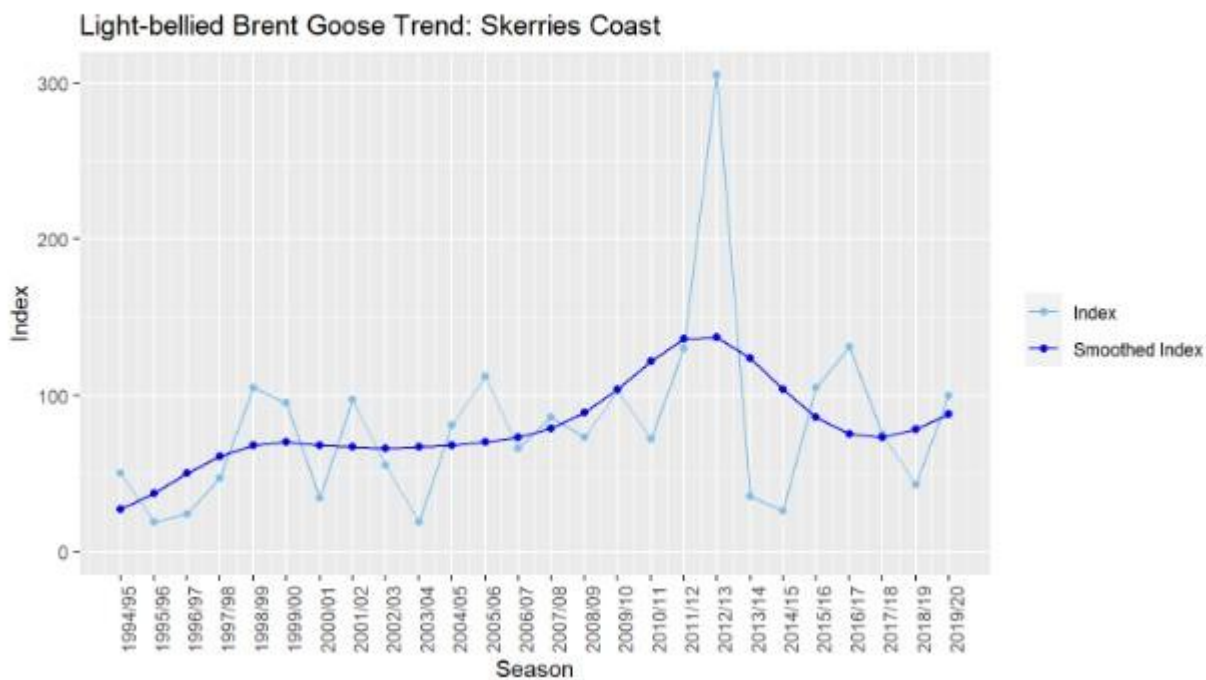
Light-bellied Brent Goose



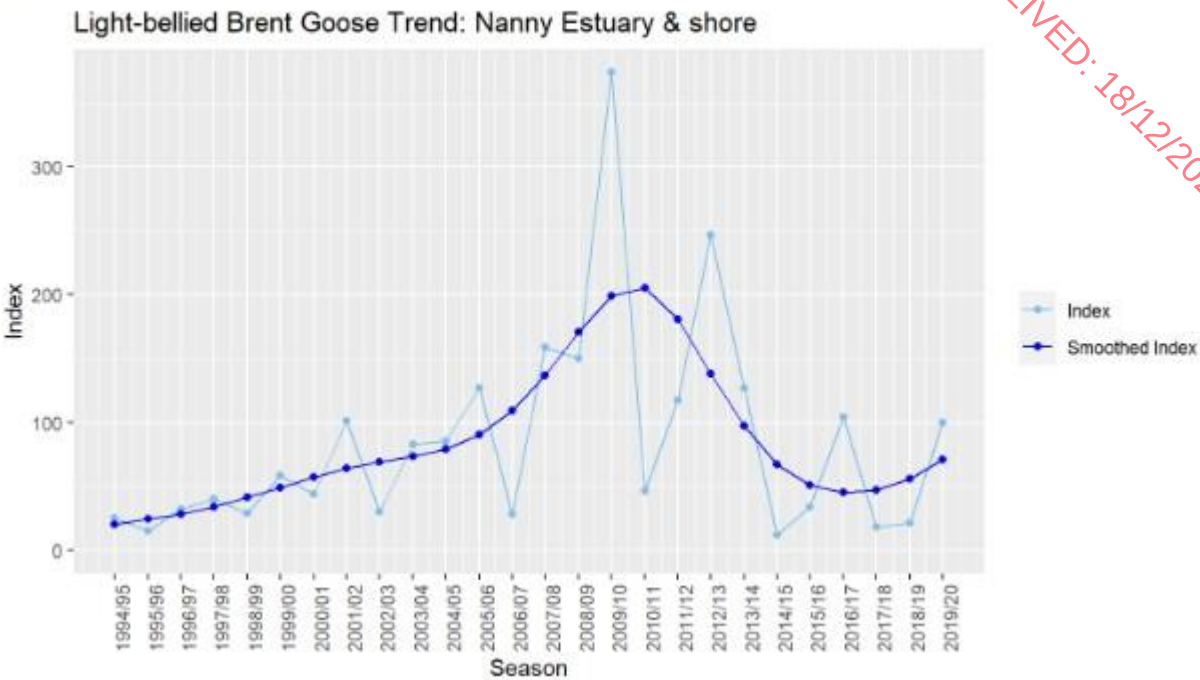
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Appendix 4.3d – I-WeBS Skerries Coast (site code OU904) trends of relevant species recorded in this report.

Light-bellied Brent Goose



Light-bellied Brent Goose



APPENDIX 4.4 - ORNITHOLOGICAL SURVEY OF LANDS AT FLEMINGTON LANE, BALBRIGGAN, CO. DUBLIN.

1. Introduction

Joseph Adamson MCIEEM was appointed by Altamar Ltd. to conduct an ornithological survey of a parcel of land at Flemington Lane, located to the northwest of the town of Balbriggan, Co. Dublin. The purpose of the site visits was to survey the site to record species of birds that are frequenting the area.

2. Survey Area

The survey site, comprising of two parcels of land, lies to the west of a housing estate in an area of Balbriggan known as Flemington. The larger of the two parcels is bounded to the north by agricultural fields, to the south by a new residential housing estate, and to the east by a housing estate in an area of Balbriggan known as Tankardstown. A water treatment plant that serves the town of Balbriggan is located to the west of the site. A new road leading from the Tankardstown housing estate to the entrance to the water treatment plant bisects the site in an east-west direction. A dirt track trends from the south of the site through the centre of the site.

The second parcel is much smaller in size and is comprised of an agricultural field, bounded by a hedgerow to the south of it. This parcel is located west of the larger parcel and to the north of the water treatment plant.

The survey site was dominated for the most part by agricultural fields containing Oil Seed Rape (OSR). There are very few hedgerows within the site, and those that are present are in poor condition with wide gaps. The larger parcel of the site was accessed from the south, through a new housing estate. The smaller parcel was accessed from a secondary road that borders the field to the west.

3. Methodology

The site was surveyed on the 27th and 28th February, and the 7th, 18th and 21st March 2023. Weather at the times of survey was suitable for recording, with bright and sunny spells for the most part, with occasional showers on the 18th and 21st March.

All areas within the sight boundary were surveyed by systematically walking and recording birds heard and observed. A list of birds observed during the site visit was then compiled for the entire site (Table 1).

A note was made of any species of conservation interest recorded at the site. Species highlighted in red represent species whose breeding population has declined by 50% over the last 25-30 years. Species highlighted in amber represent species that are of European

Conservation Concern. They are Amber-listed because of their unfavourable conservation status but not concentrated in Europe. The remaining species are Green-listed, species of favourable conservation status (Gilbert, G., Stanbury, A., and Lewis, I.) (Ref.1).

4. Results

Table 1: Bird species recorded within the site during the Winter Bird Survey, 2023, at Flemington Lane, Balbriggan, Co. Dublin

Species	Qualification Criteria	Comments
Common Buzzard <i>Buteo buteo</i>		Observed on four occasions throughout the site, usually seen commuting over the fields within the site. There are no suitable trees for breeding within the site.
Herring Gull <i>Larus argentatus</i>	SPEC2, BDMp1, BDMp2	Birds were frequently observed over the site due to the proximity of the survey site to the coast.
Woodpigeon <i>Columba palumbus</i>		Frequently observed overhead. Likely to breed in mature hedgerows and trees outside of the site.
Meadow Pipit <i>Anthus pratensis</i>	SPEC1	Occasionally flushed from the OSR fields. Likely to breed in small numbers within the site.
Pied Wagtail <i>Motacilla alba yarelli</i>		Observed along the track that runs in a northerly direction through the site and the new road leading to the water treatment plant.
Wren <i>Troglodytes troglodytes</i>		Distantly observed on one occasion. May breed in hedgerows at the north of the site.
Robin <i>Erithacus rubecula</i>		One heard singing in residential garden, east of the site.
Fieldfare <i>Turdus pilaris</i>		A flock of 15 was observed flying over the site on the 27 th of March. A Winter visitor to Ireland from Northern and Central Europe. Does not breed.
Blackbird <i>Turdus merula</i>		Frequently observed in small numbers within the site on all survey dates. Likely to breed within the site.
Magpie <i>Pica pica</i>		Infrequently observed over the site on all survey dates.
Jackdaw <i>Corvus monedula</i>		Occasionally observed flying overhead on all survey dates. Likely to breed in the housing estate east of the site.
Rook		Frequently observed flying overhead. No rookeries observed on the site.

Species	Qualification Criteria	Comments
<i>Corvus frugilegus</i>		
Raven <i>Corvus corax</i>		Two observed flying overhead on the 27 th of February.
Starling <i>Sturnus vulgaris</i>	SPEC3	Occasionally observed flying over the site. Likely to breed in the housing estate east of the site.
Chaffinch <i>Fringilla coelebs</i>		A flock of 6 was observed on waste ground, south of the site on the 21 st March.
Redpoll <i>Acanthis flammea</i>		Occasionally observed in single numbers over the site. May breed in hedgerows to the north of the site.
Linnet <i>Carduelis cannabina</i>	SPEC 2	Flocks of up to 15 individuals were observed on the waste ground south of the site during all survey dates. Flocks of Linnets are common on waste ground and open fields in Winter on the East coast of Ireland and the birds may be immigrants from Scotland or the Northwest of England. May breed in hedgerows in small numbers, north of the site.
Goldfinch <i>Carduelis carduelis</i>		Occasionally observed on all survey dates. Common in Ireland and may breed in hedgerows at the north of the site.
Yellowhammer <i>Emberiza citrinella</i>	BDp2, BDr2	A single individual was flushed from one of the OSR fields on the 18 th March. A male and female was observed on the 21 st of March. A scarce bird in Ireland, but can be quite frequently observed in parts of North County Dublin and Meath. May breed within the site.

Qualifying criteria: Red List Criteria- SPEC1 (species that are of global conservation concern). SPEC3 (species are those for which the global population is concentrated outside Europe) BDp1 (breeding population decline over shorter time periods) BDp2 (breeding population decline over longer time periods). BDr2 (breeding range decline over longer time periods) Amber List Criteria- Categories that depict an unfavourable conservation status in Europe, but not necessarily of global concern. WL (Localised non-breeding population) WDMp1 (Moderate non-breeding population decline over the short term) BDMr1 and BDMr2 (Moderate breeding range decline over short term (1) and long term (2)) BDMp1 (short-term decline in breeding population), BDMp2 (long-term decline in breeding population). SPEC 2 (species for which the global population is concentrated in Europe). SPEC 3 (species for which the global population is concentrated outside of Europe)

A total of nineteen bird species was observed during the Winter site visits. Two Red-Listed species, namely meadow pipit and yellowhammer were observed during the site visits. The two Red -Listed species may breed within the site. Three Amber-Listed species, herring gull, starling and linnet were observed during the site visits. The only Amber-Listed species that may breed within the site is linnet. All other species observed are Green-Listed, species of favourable conservation status.

5. Discussion

Birds observed at the Flemington Lane site are typical of the habitats present. The species assemblage is a reflection of the agricultural fields, hedgerows and overgrown waste ground habitats within and around the site and the birds observed are typical of birds occurring in these habitats in North County Dublin in Winter.

The agricultural grassland fields to the west of the site within the boundary of the water treatment plant were devoid of birds for the most part, with the exception of birds observed flying overhead.

6. Reference

Ref. 1 Gilbert, G, Stanbury, A. & Lewis, I K. Birds of Conservation Concern in Ireland 4: 2020–2026. Irish Birds 43: 1-23.

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APPENDIX 4.5 - ORNITHOLOGICAL SURVEY OF LANDS AT FLEMINGTON LANE, BALBRIGGAN, CO. DUBLIN (WINTER 2023).

Introduction

Joseph Adamson MCIEEM was appointed by Altamar Ltd. to conduct a Winter ornithological survey of a parcel of land at Flemington Lane, located to the northwest of the town of Balbriggan, Co. Dublin, over the Winter of 2023/2024. This follows on from an ornithological survey of the site, carried out in February and March of 2023, by the same author. The purpose of the site visits was to survey the site to record species of birds that are frequenting the area.

Survey Area

The survey site, comprising of two parcels of land, lies to the west of a housing estate in an area of Balbriggan known as Flemington. The larger of the two parcels is bounded to the north by agricultural fields, to the south by a new residential housing estate, and to the east by a housing estate in an area of Balbriggan known as Tankardstown. A water treatment plant that serves the town of Balbriggan is located to the west of the site. A new road leading from the Tankardstown housing estate to the entrance to the water treatment plant bisects the site in an east-west direction. A dirt track trends from the south of the site through the centre of the site.

The second parcel is much smaller in size and is comprised of an agricultural field, bounded by a hedgerow to the south of it. This parcel is located west of the larger parcel and to the north of the water treatment plant.

The survey site was dominated for the most part by agricultural fields of stubble in which it appeared that Corn had been grown in the Summer of 2023. During the survey of February and March 2023, these agricultural fields had been under Oil Seed Rape. During the survey on the 18th of January 2024, it was evident that one of the stubble fields by the road leading up to the Water Treatment Plant had been partially ploughed when workers from the Plant were installing Sluice Valves, Air Valves and Fire Hydrants by the edge of the field. There are very few hedgerows within the site, and those that are present are in poor condition with wide gaps. The larger parcel of the site was accessed from the east, through the entrance to the Balbriggan Water Treatment Plant, which is located to the west of the site. The smaller parcel was accessed from a secondary road that borders the field to the west.

Methodology

The site was surveyed on the 25th and 29th October, the 4th and 20th November, the 4th and 24th December 2023, the 8th and 18th January, the 5th and 19th of February and the 3rd and 11th March 2024. Weather at the times of survey was suitable for recording, with clear spells for the most part, with strong northwesterly winds on the 4th of November 2023 and very strong southwesterlies on the 24th December 2024.

All areas within the sight boundary were surveyed by systematically walking and recording birds heard and observed. A list of birds observed during the site visit was then compiled for the entire site (Table 1).

A note was made of any species of conservation interest recorded at the site. Species highlighted in red represent species whose breeding population has declined by 50% over the last 25-30 years. Species highlighted in amber represent species that are of European Conservation Concern. They are Amber-listed because of their unfavourable conservation status but not concentrated in Europe. The remaining species are Green-listed, species of favourable conservation status (Gilbert, G., Stanbury, A., and Lewis, I.) (Ref.1).

Results

Table 1: Bird species recorded within the site during the Winter Bird Survey of 2023/2024, at Flemington Lane, Balbriggan, Co. Dublin

Species	Qualification Criteria	Comments
Common Buzzard <i>Buteo buteo</i>		Two birds were observed circling over the stubble field by the road leading to the Water Treatment Plant on the 4 th November 2023. One bird observed hunting over the field by the water treatment plant on the 4 th December 2023. This field is outside of the site boundary.
Herring Gull <i>Larus argentatus</i>	SPEC2, BDMp2, BDMp1,	Six birds were observed over the site on the 25 th of October 2023. 20 birds sitting and occasionally foraging in the stubble field by the road leading up to the Water Treatment Plant on the 4 th of November 2023. There were very heavy showers, with Force 3-4 north-easterly winds on this date. No Herring Gulls were observed at the site on the 4 th of December 2023. A group of thirty-one Herring Gulls was observed sitting in the stubble field by the road leading to the Water Treatment Plant on the 24 th of December 2023. These birds were sheltering due to very blustery Force 5-6 southwest winds and heavy squalls. No Herring Gulls were observed during the 18 th of January 2024 site survey due to disturbance from Water Treatment Plant Workers installing valves at the edge of the field by the road leading to the Water Treatment Plant. No Herring Gulls were observed during the 5 th of February site visit. Four Herring Gulls were observed sitting and occasionally feeding alongside Rooks in the ploughed areas of the stubble field by the road leading to the Water Treatment Plant on the 19 th of February. During the site visit on the 3 rd of March, there were lots of Herring Gulls on roof tops of the housing estate to the east of the site. A lot of these birds were observed in pairs, indicating that they would be ready to start breeding. On the same date three Herring Gulls were feeding on the ploughed strip of the stubble field with Rooks and Jackdaws. There were no Herring Gulls observed on the stubble field during the 11 th March site visit.
Woodpigeon <i>Columba palumbus</i>		Frequently observed overhead. Likely to breed in mature hedgerows and trees outside of the site.
Collared Dove <i>Streptopelia decaocto</i>		One bird flew over the site in an easterly direction on the 20 th November 2023. One bird observed flying overhead on the 24 th December 2023.
Meadow Pipit <i>Anthus pratensis</i>	SPEC1	Occasionally flushed from all the stubble fields in low numbers. Likely to breed in small numbers within the site, in particular the field within the site that is currently under grass.
Skylark <i>Alauda arvensis</i>	SPEC3	Small numbers were observed flying overhead during the 25 th of October site visit. These were most likely migratory birds.
Pied Wagtail <i>Motacilla alba yarelli</i>		Observed along the track that runs in a northerly direction through the site and the new road leading to the water treatment plant.

Species	Qualification Criteria	Comments
Wren <i>Troglodytes troglodytes</i>		Distantly observed on one occasion. May breed in hedgerows at the north of the site.
Robin <i>Erithacus rubecula</i>		Four birds singing on the site on the 25 th October 2023.
Redwing <i>Turdus iliacus</i>		Three birds observed on the site on the 4 th November 2023. A Winter visitor to Ireland from Iceland and Scandinavia. Does not breed.
Blackbird <i>Turdus merula</i>		Frequently observed in small numbers within the site on all survey dates. Likely to breed within the site.
Magpie <i>Pica pica</i>		Infrequently observed over the site on all survey dates.
Jackdaw <i>Corvus monedula</i>		Occasionally observed flying overhead on all survey dates. Observed feeding in the stubble field that was partially ploughed/disturbed during the January 2024 site visit. Likely to breed in the housing estate east of the site.
Rook <i>Corvus frugilegus</i>		Frequently observed flying overhead. Also observed feeding in the stubble field that was partially ploughed in January 2024. No rookeries observed on the site.
Starling <i>Sturnus vulgaris</i>	SPEC 3	Occasionally observed flying over the site. Likely to breed in the housing estate east of the site.
Chaffinch <i>Fringilla coelebs</i>		Occasionally observed at the site, associating with other finches. May breed in hedgerows within the site
Redpoll <i>Acanthis flammea</i>		Occasionally observed in single numbers over the site. May breed in hedgerows to the north of the site.
Linnet <i>Carduelis cannabina</i>	SPEC 2	A flock of c. 150 birds was observed on the 25 th October 2023. A flock of 20 birds was observed on the 3 rd February 2024. Flocks of Linnets are common on waste ground and open fields in Winter on the East coast of Ireland in and the birds may be immigrants from Scotland or the Northwest of England. May breed in hedgerows in small numbers, north of the site.
Goldfinch <i>Carduelis carduelis</i>		Occasionally observed on all survey dates. Common in Ireland and may breed in hedgerows at the north of the site.
Greenfinch <i>Carduelis chloris</i>	BDMp1	Five birds were observed with a large flock of c. 150 Linnets on the 25 th October 2023. A flock of fifteen was observed with a flock of Linnets on the 4 th of December 2023.
Yellowhammer <i>Emberiza citrinella</i>	BDp2, BDr2	Five birds were observed along a hedgerow by the northernmost stubble field on the 19 th February 2024. Two birds flew overhead at the south of the site on the same date. A scarce bird in Ireland, but can be quite frequently observed in parts of North County Dublin and Meath.
Reed Bunting <i>Emberiza schoeniclus</i>		Three females were observed in a hedgerow at the southwest of the site on the 4 th of November 2023.

Qualifying criteria: Red List Criteria- SPEC1 (species that are of global conservation concern). SPEC3 (species are those for which the global population is concentrated outside Europe) BDp1 (breeding population decline over shorter time periods) BDp2 (breeding population decline over longer time periods). BDr2 (breeding range decline over longer time periods) Amber List Criteria- Categories that depict an unfavourable conservation status in Europe, but not necessarily of global concern. WI (Localised non-breeding population) WDMp1 (Moderate non-breeding population)

decline over the short term) BDMr1 and BDMr2 (Moderate breeding range decline over short term (1) and long term(2) BDMP1 (short-term decline in breeding population), BDMP2 (long-term decline in breeding population). SPEC 2 (species for which the global population is concentrated in Europe). SPEC 3 (species for which the global population is concentrated outside of Europe)

A total of twenty-two bird species was observed during the Winter 2023/2024 bird survey. Two Red-Listed species, namely meadow pipit and yellowhammer were observed during the site visits. The two Red -Listed species may breed within the site. Three Amber-Listed species, herring gull, starling, skylark, greenfinch and linnet were observed during the site visits. The only Amber-Listed species that may breed within the site are greenfinch and linnet. All other species observed are Green-Listed, species of favourable conservation status.

Discussion

Birds observed at the Flemington Lane site are typical of the habitats present. The species assemblage is a reflection of the agricultural fields, hedgerows and overgrown waste ground habitats within and around the site and the birds observed are typical of birds occurring in these habitats in North County Dublin in Winter.

The agricultural grassland fields to the west of the site within the boundary of the water treatment plant were devoid of birds for the most part, with the exception of birds observed flying overhead and occasional foraging rooks when the fields were saturated due to frequent rain events.

This report is also a response to concerns that were raised about the occurrence of herring gull observed at the site in the survey of 2023, and that the occurrence of this species at the site was not considered in relation to the species being one of the qualifying interests in the newly established North-West Irish Sea Special Protection Area (SPA). A number of points need to be raised regarding the occurrence of this species at the site.

The Winter survey report carried out in February and March 2023 mentioned that birds were observed flying overhead. It did not mention that the fields within the site were being utilised by herring gulls. Afterall, during that survey, all fields, with the exception of a field under grass, were planted with Oil Seed Rape. The following summer, the fields were under Corn. It was only when the Corn was harvested and the fields became Corn stubble fields, when the winter survey commenced, that herring gulls, and indeed corvids, such as rooks and jackdaws were present.

The gulls only started to occur at the site when the fields were under stubble. Due to constant rain events, invertebrates within the soil rise to the surface, which makes it easier for gulls to feed on them. Most of the time the gulls were sitting, in small numbers.

It must be noted that only one stubble field within the entire site, namely the field adjacent to the road leading up to the Water Treatment Plant, was occupied by gulls and corvids. It must be noted that during the site visits on the 4th of November and the 24th of December herring gulls were present in this particular field, in double digit numbers. The weather on these days was extremely inclement and the birds were merely sitting and sheltering from the strong winds.

During the 18th of January site visit, it was noted that the soil within this particular stubble field had been disturbed, due to Water Treatment Plant workers installing water valves by the road. The soil had been disturbed in strips, where pipes were laid, and it was on these strips where gulls and corvids were feeding.

It is not unusual for gull species to occur and feed in fields in inland sites. A recently ploughed field can attract hundreds of gulls, as indeed, a field where the first cut of silage has taken place, or any grass cutting in general.

Herring gulls were present flying around the site on all monthly visits. They were also abundant flying over Balbriggan town. This is to be expected in any coastal town in Ireland. It is known that they breed on roof tops in the town and are regarded as a nuisance species by residents in the area.

In conclusion, just because herring gulls were present within the survey site does not necessarily mean that this is their preferred habitat within the area. During the final site visit on the 11th of March, there were no herring gulls present. However, on the same date, the author observed a large number of c.3,000+ gulls, mainly comprised of herring gulls, feeding on the tideline of Gormanston Strand, located <5km northeast of the study site. The large number of gulls was present at Gormanston Strand after a north-easterly storm on Saturday the 9th of March.

Reference

Ref. 1 Gilbert, G, Stanbury, A. & Lewis, I K. Birds of Conservation Concern in Ireland 4: 2020–2026. Irish Birds 43: 1-23.

APPENDIX I: ARBORICULTURAL REPORT

Arboricultural Report – Charles McCorkell

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Arboricultural Report

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Tree Survey,
Arboricultural Impact Assessment &
Arboricultural Method Statement

In relation to the Large-Scale Residential Development at:

**Flemington South
Balbriggan
Co. Dublin**

On behalf of:

Glenveagh Homes Ltd.

December 2025

250401-PD-11-A

CHARLES MCCORKELL
ARBORICULTURAL CONSULTANCY

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Section 1: Arboricultural Impact Assessment

1 Summary

- 1.1 This arboricultural report has been instructed by Glenveagh Homes Ltd. (the 'Applicant').
- 1.2 The development proposal is for a 'Large-Scale Residential Development' (LRD) at Flemington South, Balbriggan, Co. Dublin (the 'Application Site').
- 1.3 This report includes:
- an assessment of the trees, their quality and value in accordance with BS 5837:2012 - Trees in relation to design, demolition and construction;
 - the site context and observations on the trees;
 - local planning policies relevant to the consideration of trees on the site;
 - the impact of the proposed development upon the tree population in and around the site;
 - methods of reducing impacts on trees; and
 - measures to be taken to protect trees during the proposed works.
- 1.4 The proposed removals are specified within the Tree Work Schedule at Appendix A and are highlighted in the Tree Removal Plans at Appendix B. The proposed removals have been assessed and their loss will not have a significant impact on the visual appearance of the local surrounding area.
- 1.5 Substantial new tree planting has been proposed to mitigate the proposed removals and in the medium to long term, this new planting will have a positive impact on the amenities and visual appearance of the development and local surrounding landscape.
- 1.6 In conclusion, the proposed development is achievable in both arboricultural terms and in relation to local planning policy as it relates to trees. Tree impacts have been assessed and tree protection measures have been specified in accordance with best practice and are sufficient to safeguard retained trees during the proposed works.

2 Introduction

Instructions

- 2.1 This arboricultural report has been instructed by Glenveagh Homes Ltd., to provide information to assist all parties involved in the planning process to make balanced judgements with regard to arboricultural features in relation to the proposed development at Flemington South, Balbriggan, Co. Dublin.

Development proposal

- 2.2 The proposal is for the construction of a Large-Scale Residential Development with associated landscaping, engineering, and all site infrastructure works.

Qualification and experience

- 2.3 This report has been prepared by Charles McCorkell. Charles is a Chartered Arboricultural Consultant dealing with trees in relation to all forms of human activity, including the built environment. He is a Professional Member of the Institute of Chartered Foresters, a Professional Member of the Arboricultural Association, a qualified professional tree inspector (LANTRA), and has a BSc Honours Degree in Arboriculture from the University of Central Lancashire.

Scope and limitations

- 2.4 The survey undertaken is not a health and safety assessment of trees; however, trees identified as imminently dangerous will have been highlighted and recommendations made, where appropriate.
- 2.5 The contents of this report are the copyright of Charles McCorkell Arboricultural Consultancy and may not be distributed or copied without the author's permission.

Methodology and guidance

- 2.6 The author of this report has referred to *British Standard 5837: Trees in relation to design, demolition and construction (2012)* which provides a methodology for the assessment of trees and other significant vegetation on development sites.
- 2.7 BS 5837 (2012) is intended to assist decision making with regard to existing and proposed trees and sets out the principles and procedures to be applied to achieve a harmonious relationship between existing and new trees and structures that can be sustained for the long term.

- 2.8 The BS 5837 (2012) recommends the National Joint Utilities Group (NJUG) document *Guidelines for the planning, installation and maintenance of utility apparatus in the proximity to trees*. Volume 4, issue 2. London: NJUG, 2007, as a normative reference for guidance on the installation of utilities within proximity to trees.

Supporting information

- 2.9 This report should be read in conjunction with the following supporting documents attached to this report.

Document	Reference	Location
Arboricultural Method Statement	N/A	Section 2
Tree Schedule	250401-PD-10	Appendix A
Tree Work Schedule	250401-PD-12	Appendix A
Tree Survey Plans 01-02	250401-P-10-01 & 02	Appendix B
Tree Removal Plans 01-02	250401-P-11-01 & 02	Appendix B
Tree Protection Plans 01-02	250401-P-12-01 & 02	Appendix B

Definitions

- 2.10 **Root Protection Area (RPA)** – a layout design tool indicating the area surrounding a tree that contains sufficient rooting volume to ensure the survival of the tree.
- 2.11 **Tree Protection Zone (TPZ)** – an area based on the RPA in m² identified by an arboriculturist, to be protected during development, including demolition and construction work, by the use of barriers and/or ground protection fit for purpose to ensure the successful long-term retention of a tree.

3 Observations & Context

Site visit

- 3.1 The site was visited by Charles McCorkell on 27 April 2025 and 14 August 2025. The purpose of the visit was to survey trees and hedgerows which may be of significance to the proposed development. The survey was undertaken in accordance with *British Standard 5837: Trees in relation to design, demolition and construction (2012)*.

Site location and description

- 3.2 The Application Site is located on the western side of Balbriggan (Map 1). It consists of agricultural land which is separated by native hedgerows and ditches.
- 3.3 The area surrounding the site contains residential properties to the east and agricultural lands to the west and north.



Map 1 (Google 2025): Dashed yellow line indicating the approximate location of the site within the surrounding area.

View of the site and trees



Photo 1: View of mixed native hedgerow and tree line H63 and H64



Photo 2: View of hedgerow H69.



Photo 3: View of hedgerow H46 and sycamore T47.



Photo 4: View of the tree and hedge line H29.



Photo 5: View of hedgerow H13 and sycamore T12.



Photo 6: View of the ash trees T6 and T7.



Photo 7: View of ash T101, beech T105 and mixed native hedgerow H104.



Photo 8: View of mixed native hedgerow H98.

4 Local Planning Policy

The Fingal Development Plan 2023 – 2029

- 4.1 The Fingal Development Plan 2023 – 2029 came into effect on 5th April 2023 and contains several policies that relate to trees, woodlands and hedgerows. Saved policies and objectives relating to this application include:

Chapter 9.6.9 Protection of Trees and Hedgerows

Policy GINHP21 – Protection of Trees and Hedgerows

Protect existing woodlands, trees and hedgerows which are of amenity or biodiversity value and/ or contribute to landscape character and ensure that proper provision is made for their protection and management.

Policy GINHP22 – Tree Planting

Provide for appropriate protection of trees and hedgerows, recognising their value to our natural heritage, biodiversity and climate action and encourage tree planting in appropriate locations.

Objective GINHO44 – Tree Removal

Ensure adequate justification for tree removal and require documentation and recording of reason where felling is proposed and avoid removal of trees without adequate justification.

Chapter 12. Development Management Standards – Tree Policy

Objective DMSO127 – Management of Trees and Hedgerows

Protect, preserve and ensure the effective management of trees and groups of trees and hedgerows.

Objective DMSO128 – Protection of Trees and Hedgerows during Development

Ensure during the course of development, trees and hedgerows that are conditioned for retention are fully protected in accordance with “BS5837 (2012) Trees in relation to the Design, Demolition and Construction – Recommendations” or as may be updated and are monitored by the appointed arboricultural consultant.

5 Technical Information

Tree data

- 5.1 The Tree Survey Plans at Appendix B illustrate the location of trees and hedgerows, the extent of the spread of their crowns, and their root protection areas. Dimensions, comments and information for each tree and hedgerow are given in the Tree Schedule at Appendix A.

Life stage analysis

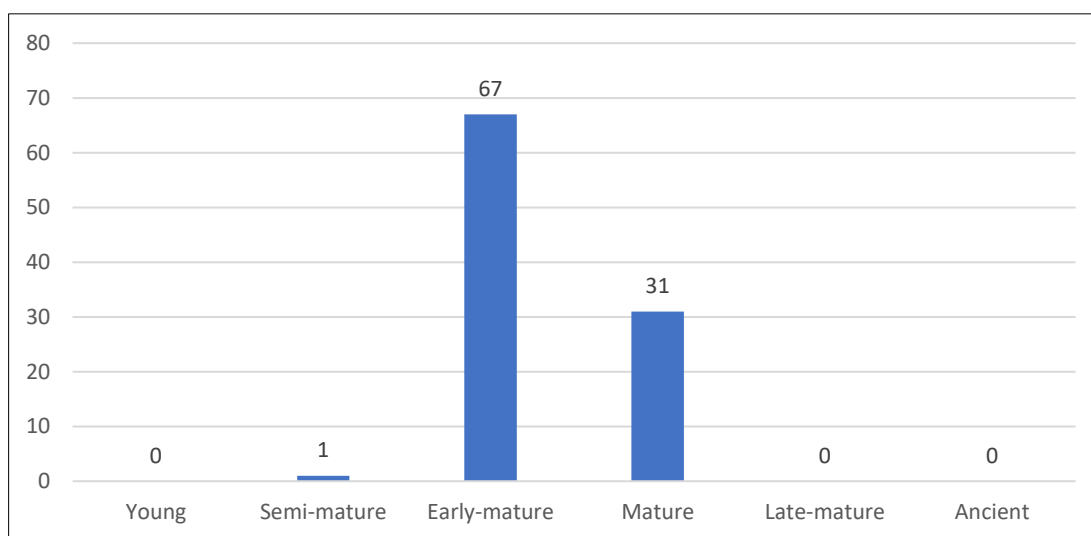


Figure 1: Life stage analysis of the 99 survey entries recorded.

BS5837 (2012) category breakdown

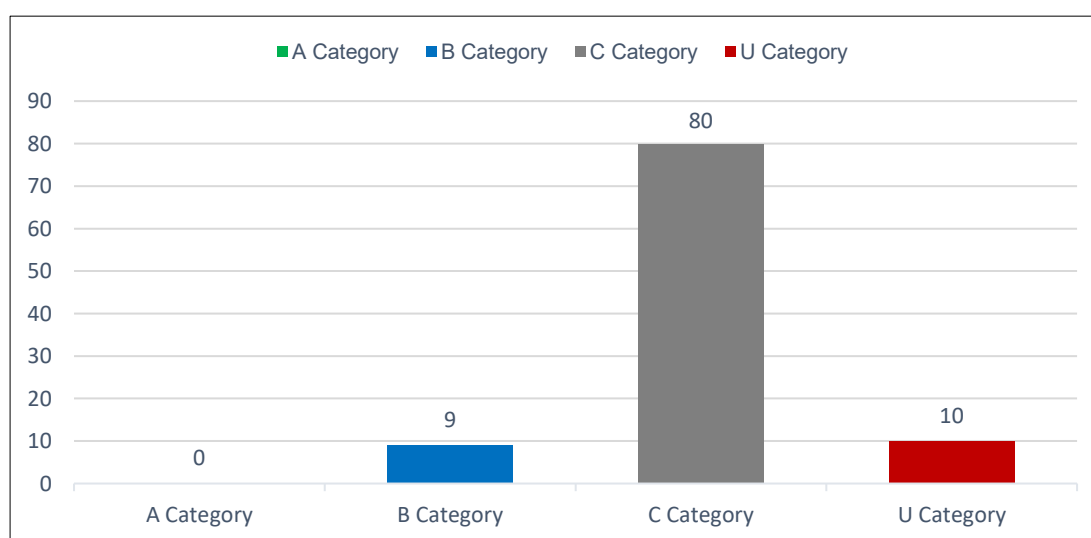


Figure 2: Breakdown of BS5837:2012 categories of the 99 survey entries recorded.

6 Analysis of the Proposal in Respect of Trees

Arboricultural Impacts

- 6.1 **Loss of trees** – The proposed development will require the removal of 34 trees and 7 groups of trees/hedgerows, and the partial removal of 19 groups of trees/hedgerows. In total, the removal of hedgerows is 1,639 linear metres (532 linear metres of which is to facilitate the road upgrades).
- 6.2 Of the 59 survey entries to be removed or partially removed, 1 tree and 5 hedgerows are of moderate quality and value (B Category), 27 trees and 20 groups of trees/hedgerows are of low quality and value (C Category), and 6 trees and 1 hedgerow are of poor quality (U Category).
- 6.3 The proposed removals are highlighted on the Tree Removal Plans at Appendix B and are specified within the Tree Work Schedule at Appendix A.

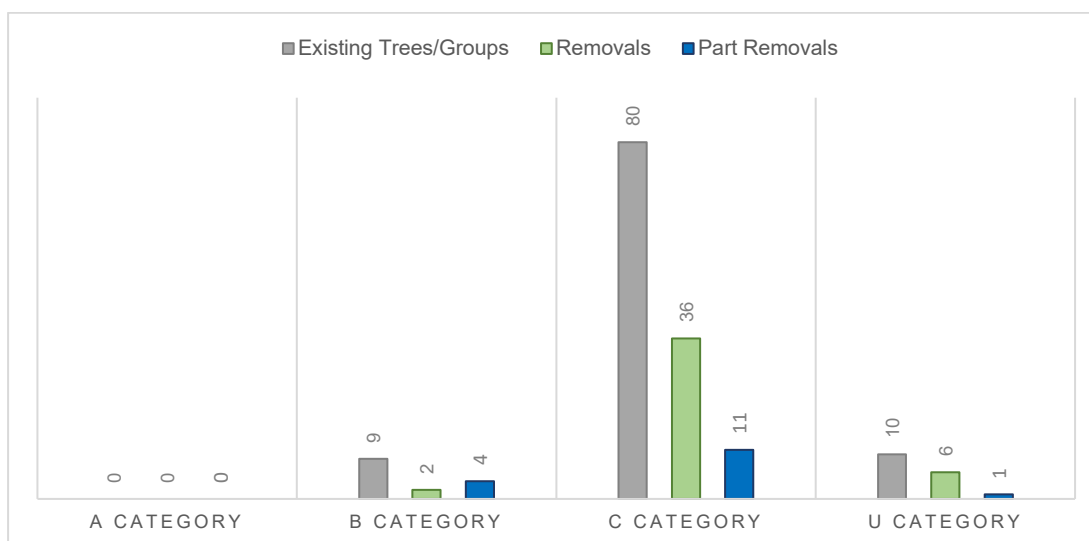


Figure 3: Proposed removals in comparison to the total number of survey entries recorded and their category in accordance with BS5837.

- 6.4 The loss of trees and hedgerows will have an initial impact on the local canopy cover and on the character and appearance of the surrounding rural landscape. Considering the site's change of use, its landscape character will be impacted, and as the majority of trees and hedgerows to be removed are of low quality, the overall extent of the impact is not deemed to be significant.
- 6.5 **Tree and hedgerow management works** – The lateral growth of hedgerows is required to be pruned in areas to provide sufficient clearance for development works to be carried out. The extent and method of these pruning works must be agreed upon

on-site before construction works commence. It is essential that where large branches are pruned, a clean cut is made to allow regrowth to occur.

- 6.6 All tree management works must be specified on-site by the arboricultural consultant and all tree surgery works must be carried out by a reputable arboricultural contractor in accordance with the recommendations given in BS 3998:2010 – Tree Work Recommendations.
- 6.7 **Compound area** – The proposed compound area has not yet been designed; however, there is sufficient space available throughout the site to avoid any unnecessary impacts to retained trees and hedgerows.
- 6.8 **Construction operations** – The construction of the main built element of the proposal will not require excavation or other works within the RPAs of retained trees. No special methods of construction are therefore required; however, it will be necessary to ensure that site operations do not impact trees and hedgerows or the soil environment upon which they rely. Details of the measures to be taken to protect trees and hedgerows are included in the Tree Protection Plans at Appendix B.
- 6.9 **Tree protection measures** – All retained trees and hedgerows can be successfully protected during the proposed development works by using robust fencing measures which comply with the recommendations outlined within BS 5837:2012. The location and specification of all tree protection measures are highlighted on the Tree Protection Plans at Appendix B.
- 6.10 **Drainage and services** – The proposed drainage layout within the main development site is shown on the Tree Protection Plans at Appendix B. Excavation works to install the proposed drainage runs located in close proximity to retained trees and hedgerows must be supervised by the arboricultural consultant.
- 6.11 Full details of all proposed underground services are currently unknown. Where additional underground services are required, these should avoid the RPAs of retained trees or special installation techniques must be used under arboricultural supervision.
- 6.12 All drainage and service runs located within tree RPAs must be installed in accordance with industry best practice. The BS 5837:2012 recommends the National Joint Utilities Group Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees Volume 4, issue 2: NJUG, 2007 as a normative reference in these instances.
- 6.13 **Landscape operations** - Landscaping operations will typically take place at the end of the construction period. These works will normally require the removal of protective

fencing to facilitate access for works. There is a risk that machinery may damage soil structure where tree roots are growing. These risks can be managed by maintaining good professional standards of work and working to a method statement. The principle of avoiding soil disturbance or changes in levels within the RPAs of retained trees should be followed unless arboricultural advice has been sought.

Arboricultural mitigation

- 6.14 A detailed landscape plan has been designed and will form part of the planning application for the development proposal. This design includes the planting of 466 new standard and semi-mature trees and 2068 linear metres of new hedgerows, of which 500 linear metres are native, 1193 linear metres are Carpinus hedgerows located internally along property boundaries and within privacy strips at apartment blocks, and 375 linear metres are mixed hedging to the front of bin stores.
- 6.15 The proposed new planting will mitigate the loss of hedgerows and trees required to facilitate the development and will enhance the tree cover throughout the site and within the local area. This will have a positive impact on the local canopy cover and the character and appearance of development, and the surrounding landscape.

7 Discussion & Conclusion

General Change

- 7.1 The trees and hedgerows proposed to be removed to facilitate the development will have an initial impact on the local surrounding landscape; however, this impact is not deemed to be significant, as the majority of trees and hedgerows are of low quality and value.
- 7.2 Space has been provided within the development proposal for new high-quality tree and hedgerow planting to be carried out. Through structured tree planting, there is an opportunity to enhance local canopy cover and the diversity of species, which will not only help to mitigate the proposed removals but can also help to enhance the visual appearance of the development.

Proposal in relation to local planning policy

- 7.3 The proposal requires the removal of trees and hedgerows that are of biodiversity value and contribute to the landscape character of the area. These losses have been assessed, and there are no trees or hedgerows of high quality and value required to be removed.
- 7.4 The development proposal has provided space for new high-quality tree and hedgerow planting to be carried out. Such planting will help to mitigate the loss of the proposed removals and enhance the visual appearance of the development.
- 7.5 The proposal has been assessed in accordance with best practice BS 5837:2012 and, provided the recommendations as detailed within this report are followed, retained trees and hedgerows can be successfully protected for the duration of construction.

Conclusion

- 7.6 Constraints posed by trees and hedgerows have been assessed and where impacts occur, these have been identified specifically in this report and can be addressed using sensitive design and construction measures.
- 7.7 The protection of retained trees and hedgerows on this site during the proposed development works can be achieved by continuing to follow the recommendations in BS5837:2012 and by compliance with suitably drafted planning conditions.

8 Recommendations

- 8.1 The proposal should be carried out in accordance with the recommendations outlined within this report.

Tree Protection

- 8.2 The positioning of tree protective barriers should be installed in accordance with BS5837:2012 as detailed on the Tree Protection Plans at Appendix B.
- 8.3 No materials or equipment other than those required to install tree protection will be delivered to the site until all fencing is in place.
- 8.4 No materials, vehicles, plant or personnel will be permitted into the tree protection zones at any time without the prior consent of the arboricultural consultant.
- 8.5 Site supervision should be carried out by an arboricultural consultant at key stages of the project to ensure that retained trees can be successfully protected during the development. Details of supervision are included within the Arboricultural Method Statement at Section 2 of this report.

Tree Works

- 8.6 All tree works are required to be carried out in accordance with best working practice BS3998:2010 – *Tree Work Recommendations* and by a reputable arboricultural contractor.

Arboricultural mitigation

- 8.7 New planting is required to help mitigate the loss of trees and hedgerows and must be carried out and maintained as specified by the Landscape Architect.
- 8.8 All new tree planting must be carried out in accordance with BS 8545:2014 *Trees: from nursery to independence in the landscape. Recommendations*.
- 8.9 New tree planting should take into consideration the mature growing size of the trees proposed, to ensure that a harmonious relationship between trees and buildings and hard surfaces can be sustained for the long term, without the need for unnecessary pruning works or removals.

Section 2: Arboricultural Method Statement

Introduction	
This report has been prepared in accordance with British Standard 5837: Trees in relation to design, demolition and construction – Recommendations (2012) which provides a methodology for the assessment and protection of trees and other significant vegetation on development sites.	
Sequence of Operations	
• Proposed tree and hedge removals. • Installation of tree protection measures. • Enabling works, including the installation of a site compound. • Construction, including the installation of drainage and services. • Landscaping. <i>Alternative sequences can be discussed and agreed with the local authority and project manager if required.</i>	
Supervision	
All key / critical activities that will affect trees during construction will be inspected and monitored by the approved arboricultural consultant. • Pre-commencement meeting with the site manager to discuss tree protection measures; • Inspection of tree works and protection measures prior to the commencement of works; • Monthly site visits to inspect tree protection measures; • Supervision during the installation of drainage and services within tree RPAs; • Supervision during any other works that may affect retained trees; and • Tree inspection upon completion.	
Arboricultural Method Statement	
Scope	Methodology
Pre-commencement meeting	Prior to the commencement of works, a meeting between the arboricultural consultant, site manager and Parks Department will be held in order to

	discuss the tree protection measures and proposed works required in close proximity to trees. Contact details of all parties will be circulated to ensure all team members are able to communicate correctly. The site manager will be responsible for the protection of all retained trees for the duration of the project. Whenever necessary, the site manager will engage the arboricultural consultant to ensure trees are adequately protected. The appointed arboricultural consultant will be available for verbal advice throughout the site works.
Tree Works	Please refer to the Tree Work Schedule at Appendix A for a list of all proposed tree works. The location of trees and hedgerows to be removed are highlighted on the Tree Removals Plan at Appendix B. It is the responsibility of the Site Manager to ensure all tree works have been approved by the local planning authority. All tree works will be carried out by a reputable arboricultural contractor in accordance with the recommendations given in BS 3998:2010 – Tree Work Recommendations. All tree works should be carried out in accordance with Section 40 of the Wildlife Act 1976 and Section 46 of the Wildlife (Amendment) Act 2000. It is the responsibility of the arboricultural contractor to ensure that no protected species are harmed whilst carrying out site clearance or tree surgery works.
Tree Protection	The position of protective fencing for construction is shown on the Tree Protection Plans at Appendix B. Protective fencing must be constructed and installed using the BS5837:2012 fencing specification as detailed on the Tree Protection Plan at Appendix B. Alternatives to those shown must be agreed in advance by the client approved arboricultural consultant. No materials or equipment other than those required to erect protective fencing will be delivered to the site before the fencing is installed. Signs will be fixed to every third panel stating, <i>'Tree Protection Area Keep Out – Any incursion into the protected area must be with the agreement of the local authority or arboricultural consultant'</i>.

	The main contractor will inform the local authority and the arboricultural consultant that tree protection is in place before site clearance works commence. No alteration, removal or repositioning of the tree protection will take place during construction without the prior consent of the arboricultural consultant.
Compound Area	The site compound must be located outside the designated TPZs as highlighted on the Tree Protection Plans at Appendix B. No excavation works within tree RPAs are permitted to install temporary services for site cabins and facilities. Any temporary services within tree RPAs must be above ground and protected accordingly. No operating generators or toxic liquids will be stored within the RPAs of retained trees during construction. Overhanging tree canopies must be taken into consideration when transporting, installing and removing site cabins near tree crowns. A banksman will be present during this process to ensure that all operations are carried out in a controlled manner and no part of the cabin meets overhanging tree crowns.
Drainage and Service Installation	All methods of work for the installation of drainage runs or services within the RPAs of retained trees will follow the guidance within Table 3 of BS 5837 (2012), or National Joint Utilities Group (NJUG) <i>Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees</i>. Volume 4, issue 2, London NJUG 2007. Prior to drainage or service installation works commencing within RPAs, the arboricultural consultant will be contacted, and a date agreed for a site meeting to run through the proposed methods of work on site with the site manager and relevant site operatives.
General Principals to Avoid Damage to Trees	All tree works will be carried out in accordance with the recommendations given in BS 3998 (2010). No fires will be permitted within 20m of the crown of any tree. No changes in soil levels will take place within the tree protection zones without prior written consent of the local authority. No materials, vehicles, plant or personnel will be permitted into the tree protection zones at any time without the prior consent of the arboricultural consultant.

	Any liquid materials spilled on site will be immediately cleared up and removed from the site. If liquid fuel or cement products are spilled within 2m of the tree protection zone, the contractor will report the incident to the arboricultural consultant immediately. The contractor will report any damage to trees or shrubs, whether caused by construction activities or from any other cause, to the arboricultural consultant immediately.
Landscape Operations	All landscape operations within the protected area will be carried out by hand, using hand tools only, unless otherwise agreed with by the arboricultural consultant. No dumping of spoil or rubbish, parking of vehicles or plant, storage of materials or temporary accommodation will be undertaken within the TPZs. All tree roots within the RPAs greater than 25mm diameter will be retained and worked around. Soil levels will not be increased or reduced within the RPAs of trees without prior agreement from the arboricultural consultant.

Appendix A - Schedule

Document	Reference	Revision
Tree Schedule	250401-PD-10	A
Tree Work Schedule	250401-PD-12	A

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250401 - Flemington Lane

Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H1	1 Crataegus monogyna (Common Hawthorn/Quick/May)	3.5	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is overgrown and has several gaps which are dominated by bramble.	14/08/2025	10.2	1.8	20-40	C2
	1 Hedera helix (Common Ivy)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
	1 Sambucus nigra (Elder)																				

Stem **green** Estimated value
Stem **AVE** Average stem diameter for tree groups
Stem **COM** Combined stem diameter in accordance with BS5837
L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

250401 - Flemington Lane

Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H2	other (Other)	2.5	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is overgrown and sparsely planted with Several areas dominated by bramble and gorse.	26/04/2025	10.2	1.8	20-40	C2
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
	1 Hedera helix (Common Ivy)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
	1 Salix caprea (Goat Willow/Great Sallow)																				
	1 Sambucus nigra (Elder)																				

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H3	1 other (Other)	3.0	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is overgrown and sparsely planted with several areas dominated by brambles and gorse.	26/04/2025	10.2	1.8	20-40	C2
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
	1 Hedera helix (Common Ivy)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
	1 Salix caprea (Goat Willow/Great Sallow)																				
	1 Sambucus nigra (Elder)																				
Tree T4	1 Fraxinus excelsior (Ash)	8.0	30	1		4.5		4.0		3.0		4.0	2.0		Early Mature	Structural condition Fair. Physiological condition Poor. Access to inspect base - Restricted / obscured. Bark wound - Mechanical. Die-back - Upper crown. Decline - Evident / observed. Deadwood - Minor. Unable to inspect tree closely due to dense scrub. Tree is infected with ash dieback.	14/08/2025	40.7	3.6	10-20	C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T6	1 Fraxinus excelsior (Ash)	16.0	75	1		6.0		8.0		8.5		3.0	2.5		Mature	Structural condition Poor. Physiological condition Poor. Access to inspect base - Restricted / obscured. Branch weight - Heavy. Bark wound - Mechanical. Competition - Adjacent trees. Decay / structural defect in crown limb / limbs - Extensive. Deadwood - Minor. Ivy or climbing plant. Leaning trunk - Minor. Shedding limb / limbs - Historic. Shedding limb / limbs - Recent. Unbalanced crown - Major. Unable to inspect tree closely due to ivy cover. Extensive decay present in upper crown structure. Tree is infected with ash dieback.	14/08/2025	254.5	9.0	0-10	U
Tree T7	1 Fraxinus excelsior (Ash)	6.5	28	1		4.5		4.5		2.0		3.0	0.0		Early Mature	Structural condition Fair. Physiological condition Good. Access to inspect base - Restricted / obscured. Deadwood - Minor. Epicormic growth - Base. Multi-stemmed. Pruning wounds - Historic. Unable to inspect tree closely due to dense scrub.	14/08/2025	35.5	3.4	20-40	C2
Hedge H8	1 Crataegus monogyna (Common Hawthorn/Quick/May)	2.0	15	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Maintained. Native hedgerow overgrown with brambles. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix.	14/08/2025	10.2	1.8	20-40	C2
	1 Hedera helix (Common Ivy)		AVE																		
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H9	1 Sambucus nigra (Elder)	3.0	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is overgrown and sparsely planted with several gaps present.	26/04/2025	10.2	1.8	20-40	C2
	1 Salix caprea (Goat Willow/Great Sallow)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
	1 Rosa canina (Dog-rose)																				
	1 Hedera helix (Common Ivy)																				
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
	1 other (Other)																				
Tree T10	1 Acer pseudoplatanus (Sycamore)	8.0	44 COM	6		5.5		6.0		4.0		6.0	1.0		Early Mature	Structural condition Fair. Physiological condition Fair. Branch - Broken. Bark wound - Physical damage or vandalism. Multi-stemmed.	26/04/2025	87.9	5.3	20-40	C1/C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H11	other (Other)	2.5	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is overgrown and sparsely planted with several gaps present.	26/04/2025	10.2	1.8	20-40	C2
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
	1 Hedera helix (Common Ivy)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rosa canina (Dog-rose)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
	1 Salix caprea (Goat Willow/Great Sallow)																				
	1 Sambucus nigra (Elder)																				
Tree T12	1 Acer pseudoplatanus (Sycamore)	9.0	48 COM	6	6.0		5.5		6.0		5.5		0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Excavation within root zone - Historic. Ivy or climbing plant. Multi-stemmed. Tree located on eastern side of the ditch.	26/04/2025	108.6	5.9	20-40	C1/C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H13	1 Acer pseudoplatanus (Sycamore)	3.0	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is overgrown. Northern and southern side of hedgerow is densely planted, center is sparsely planted with several large gaps present which are now dominated by brambles.	26/04/2025	10.2	1.8	20-40	C2
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
	1 Hedera helix (Common Ivy)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rosa canina (Dog-rose)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
	1 Sambucus nigra (Elder)																				
Hedge H14	1 Rubus fruticosus s. (Blackberry/Bramble)	1.5	10 AVE	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is overgrown, sparsely planted and dominated by brambles.	26/04/2025	4.5	1.2	10-20	C2
	1 Prunus spinosa (Blackthorn/Sloe)																				
Tree T15	1 Prunus spinosa (Blackthorn/Sloe)	5.0	25	1	4.0		3.5		3.5		3.5		2.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Ivy or climbing plant. Unable to inspect tree closely due to dense scrub.	26/04/2025	28.3	3.0	10-20	C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H16	1 Crataegus monogyna (Common Hawthorn/Quick/May)	1.5	10 AVE	1									0.0		Early Mature Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is overgrown, sparsely planted and dominated by brambles.	26/04/2025	4.5	1.2	10-20	C2	
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
	1 Sambucus nigra (Elder)																				
Tree T19	1 Fraxinus excelsior (Ash)	9.0	45 COM	3	5.0		5.5		6.0		4.5		1.0		Early Mature Structural condition Fair. Physiological condition Fair. Ivy or climbing plant. Multi-stemmed. Unable to inspect tree closely due to ivy cover. Tree is infected with ash dieback.	26/04/2025	91.6	5.4	10-20	C2	
Tree T20	1 Fraxinus excelsior (Ash)	8.0	25	1	4.0		4.0		3.0		1.0		1.0		Early Mature Structural condition Fair. Physiological condition Fair. Competition - Adjacent trees. Ivy or climbing plant. Leaning trunk - Minor. Unbalanced crown - Minor. Unable to inspect tree closely due to ivy cover. Tree is infected with ash dieback.	26/04/2025	28.3	3.0	10-20	C2	
Tree T21	1 Fraxinus excelsior (Ash)	8.0	32 COM	4	4.0		2.0		2.0		4.5		1.0		Early Mature Structural condition Fair. Physiological condition Fair. Competition - Adjacent trees. Ivy or climbing plant. Unbalanced crown - Minor. Unable to inspect tree closely due to ivy cover. Tree is infected with ash dieback.	26/04/2025	47.5	3.9	10-20	C2	
Tree T22	1 Fraxinus excelsior (Ash)	8.0	28 COM	2	2.5		5.0		3.5		3.0		1.0		Early Mature Structural condition Fair. Physiological condition Fair. Competition - Adjacent trees. Ivy or climbing plant. Unable to inspect tree closely due to ivy cover. Tree is infected with ash dieback.	26/04/2025	36.2	3.4	10-20	C2	

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T23	1 Fraxinus excelsior (Ash)	7.0	30 COM	4	4.0		3.5		2.0		3.0		1.0		Early Mature	Structural condition Fair. Physiological condition Fair. Competition - Adjacent trees. Ivy or climbing plant. Multi-stemmed. Shedding limb / limbs - Historic. Unable to inspect tree closely due to ivy cover.	26/04/2025	40.7	3.6	20-40	C2
Tree T24	1 Fraxinus excelsior (Ash)	6.5	22 COM	5	2.0		3.0		3.0		3.0		1.0		Early Mature	Structural condition Fair. Physiological condition Poor. Competition - Adjacent trees. Ivy or climbing plant. Unable to inspect tree closely due to ivy cover. Tree is infected with ash dieback.	26/04/2025	22.6	2.7	10-20	C2
Tree T25	1 Fraxinus excelsior (Ash)	6.0	25 COM	3	3.0		3.0		2.5		3.0		1.0		Early Mature	Structural condition Fair. Physiological condition Fair. Competition - Adjacent trees. Ivy or climbing plant. Multi-stemmed. Unable to inspect tree closely due to ivy cover. Tree is infected with ash dieback.	26/04/2025	30.5	3.1	10-20	C2
Tree T26	1 Fraxinus excelsior (Ash)	6.0	20 COM	4	1.0		2.5		5.0		3.0		1.0		Early Mature	Structural condition Fair. Physiological condition Poor. Competition - Adjacent trees. Ivy or climbing plant. Multi-stemmed. Unable to inspect tree closely due to ivy cover. Tree is infected with ash dieback.	26/04/2025	18.1	2.4	10-20	C2
Tree T27	1 Fraxinus excelsior (Ash)	12.0	52 COM	7	6.0		5.0		4.0		5.5		1.0		Mature	Structural condition Poor. Physiological condition Poor. Coppice stool - Coppice origin / Mature stems. Decay / structural defect - Base. Fire damage - Base / bole / principal stems. Fork - Weak with included bark. Multi-stemmed. Extensive fire damage.	26/04/2025	126.7	6.3	0-10	U
Tree T28	1 Fraxinus excelsior (Ash)	11.0	47 COM	10	4.0		5.0		6.0		5.0		1.0		Mature	Structural condition Poor. Physiological condition Poor. Bark wound - Physical damage or vandalism. Coppice stool - Coppice origin / Mature stems. Decay / structural defect - Base. Fire damage - Base / bole / principal stems. Multi-stemmed. Extensive fire damage.	26/04/2025	101.8	5.7	0-10	U

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H29	1 other (Other)	2.5	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is overgrown and sparsely planted. North and south end dominated by gorse, center area is sparsely planted hawthorn with brambles.	26/04/2025	10.2	1.8	20-40	C2
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
	1 Hedera helix (Common Ivy)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
Hedge H33	1 other (Other)	4.0	20 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is overgrown. Continuation of eastern hedgerow but much more densely planted (double row) and of better quality. There are some minor gaps on either end, but a significant hedgerow.	26/04/2025	18.1	2.4	20-40	B2
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
	1 Hedera helix (Common Ivy)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H34	1 Rubus fruticosus s. (Blackberry/Bramble)	3.0	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is overgrown and sparsely planted with several gaps dominated by brambles.	26/04/2025	10.2	1.8	20-40	C2
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Hedera helix (Common Ivy)																				
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
Tree T35	1 Crataegus monogyna (Common Hawthorn/Quick/May)	7.0	55	1	4.5		4.5		4.5		4.5		0.0		Mature	Structural condition Good. Physiological condition Good. Access to inspect base - Restricted / obscured. Ivy or climbing plant. Tree located on northern side of the ditch.	26/04/2025	136.8	6.6	40+	B1/B2
Tree T36	1 Crataegus monogyna (Common Hawthorn/Quick/May)	5.0	29 COM	3	3.5		3.5		3.5		3.5		0.0		Early Mature	Structural condition Good. Physiological condition Fair. Access to inspect base - Restricted / obscured. Deadwood - Minor. Tree located on northern side of the ditch.	26/04/2025	38.5	3.5	20-40	C2/C3
Hedge H37	1 Crataegus monogyna (Common Hawthorn/Quick/May)	3.0	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Two sections of an old hedgerow with a gap between them. There is significant bramble cover within the gap and on either side of this group along the boundary line.	26/04/2025	10.2	1.8	20-40	C2
	1 Rubus fruticosus s. (Blackberry/Bramble)																				

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Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H38	1 Rubus fruticosus s. (Blackberry/Bramble) 1 other (Other)	1.5	5 AVE	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Old hedgerow line dominated by bramble.	26/04/2025	1.1	0.6	10-20	C2
Hedge H39	1 Rubus fruticosus s. (Blackberry/Bramble)	1.5	5	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Old hedgerow line dominated by bramble.	26/04/2025	1.1	0.6	10-20	C2
Hedge H40	1 Rubus fruticosus s. (Blackberry/Bramble)	1.5	5	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Old hedgerow line dominated by bramble.	26/04/2025	1.1	0.6	10-20	C2
Hedge H41	1 Crataegus monogyna (Common Hawthorn/Quick/May) 1 Rubus fruticosus s. (Blackberry/Bramble)	3.0	15 AVE	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Sparsely planted hedgerow with several hawthorn trees in decline and suffering from fire damage. Hedgerow is mixed C/U Category.	26/04/2025	10.2	1.8	10-20	C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H42	1 Sambucus nigra (Elder)	3.0	15 AVE	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Western section of hedgerow.	26/04/2025	10.2	1.8	10-20	C2
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
	1 Hedera helix (Common Ivy)																				
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
Hedge H43	1 Rubus fruticosus s. (Blackberry/Bramble)	2.5	10 AVE	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Old hedgerow line dominated by bramble with sparsely planted hawthorn and gorse.	26/04/2025	4.5	1.2	10-20	C2
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
	1 other (Other)																				

RECEIVED: 18/12/2025

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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250401 - Flemington Lane

Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H44	1 other (Other)	4.0	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Overgrown hedgerow, densely planted section.	26/04/2025	10.2	1.8	20-40	B2
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
	1 Hedera helix (Common Ivy)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
	1 Sambucus nigra (Elder)																				
Hedge H46	1 Rubus fruticosus s. (Blackberry/Bramble)	1.5	10 AVE	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is dominated by brambles with a single hawthorn.	26/04/2025	4.5	1.2	10-20	C2
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
Tree T47	1 Acer pseudoplatanus (Sycamore)	6.5	30	1	4.0		4.0		4.0		4.0		0.0		Early Mature	Structural condition Good. Physiological condition Good. Access to inspect base - Restricted / obscured. Ivy or climbing plant. Unable to inspect tree closely due to dense scrub.	26/04/2025	40.7	3.6	20-40	B2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T48	Fraxinus excelsior (Ash)	6.5	45	1	4.0		4.0		3.5		4.0		0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Coppice stool - Regrown. Multi-stemmed. Unable to inspect tree closely due to dense scrub. Tree is infected with ash dieback.	26/04/2025	91.6	5.4	10-20	C2
Tree T49	1 Fraxinus excelsior (Ash)	6.0	27 COM	12	3.0		3.0		3.0		3.0		0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Coppice stool - Regrown. Multi-stemmed. Unable to inspect tree closely due to dense scrub.	26/04/2025	34.7	3.3	20-40	C2
Hedge H50	1 Rubus fruticosus s. (Blackberry/Bramble)	2.5	15 AVE	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is dominated by brambles with sparsely planted trees. Large gaps between trees.	26/04/2025	10.2	1.8	20-40	C2
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Hedera helix (Common Ivy)																				
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
Tree T51	1 Fraxinus excelsior (Ash)	7.0	38 COM	15	3.0		3.5		3.5		3.5		0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Coppice stool - Regrown. Multi-stemmed. Unable to inspect tree closely due to dense scrub.	26/04/2025	67.9	4.6	10-20	C2
Tree T52	1 Fraxinus excelsior (Ash)	7.0	40	1	3.0		4.0		2.5		3.5		0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Coppice stool - Regrown. Multi-stemmed. Unable to inspect tree closely due to dense scrub.	26/04/2025	72.4	4.8	10-20	C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T54	1 Acer pseudoplatanus (Sycamore)	12.0	40	1	3.5		5.0		4.0		1.0		0.0		Early Mature	Structural condition Fair. Physiological condition Good. Access to inspect base - Not possible. Competition - Adjacent trees. Epicormic growth - Base. Multi-stemmed. Suppressed crown - Minor. Unbalanced crown - Minor. Unable to inspect tree closely due to dense scrub.	26/04/2025	72.4	4.8	20-40	C2
Tree T55	1 Fraxinus excelsior (Ash)	12.0	44 COM	4	5.0		2.0		5.0		5.0		0.0		Early Mature	Structural condition Fair. Physiological condition Poor. Access to inspect base - Not possible. Competition - Adjacent trees. Die-back - Upper crown. Epicormic growth - Base. Multi-stemmed. Suppressed crown - Minor. Unbalanced crown - Minor. Unable to inspect tree closely due to dense scrub. Tree is infected with ash dieback.	26/04/2025	87.6	5.3	10-20	C2
Tree T56	1 Fraxinus excelsior (Ash)	12.0	41 COM	6		5.0		3.0		5.0		5.0	1.0		Early Mature	Structural condition Fair. Physiological condition Poor. Access to inspect base - Restricted / obscured. Competition - Adjacent trees. Die-back - Upper crown. Ivy or climbing plant. Unbalanced crown - Minor. Unable to inspect tree closely due to dense scrub. Tree is infected with ash dieback.	26/04/2025	78.4	5.0	10-20	C2
Hedge H57	1 Ligustrum ovalifolium (Privet/Garden Privet) 1 1 Crataegus monogyna (Common Hawthorn/Quick/May)	3.5	10 AVE	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix.	26/04/2025	4.5	1.2	20-40	C2
Tree T58	1 Crataegus monogyna (Common Hawthorn/Quick/May)	4.5	20	1		2.5		1.0		2.0		2.0	0.0		Early Mature	Structural condition Fair. Physiological condition Poor. Ivy or climbing plant. Unable to inspect tree closely due to dense scrub.	26/04/2025	18.1	2.4	10-20	C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

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L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T59	1 Fraxinus excelsior (Ash)	12.0	40	1		4.5		4.5		3.5		2.0	1.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Competition - Adjacent trees. Epicormic growth - Base. Ivy or climbing plant. Suppressed crown - Minor. Unbalanced crown - Minor. Unable to inspect tree closely due to dense scrub. Tree is infected with ash dieback.	26/04/2025	72.4	4.8	10-20	C2
Hedge H60	1 Rubus fruticosus s. (Blackberry/Bramble)	1.5	5	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Old hedgerow line dominated by brambles with some self-seeded ash.	26/04/2025	1.1	0.6	10-20	C2
	1 Fraxinus excelsior (Ash)		AVE																		
Tree T61	1 Fraxinus excelsior (Ash)	15.0	43	3		4.5		4.5		4.5		3.0	1.0		Early Mature	Structural condition Fair. Physiological condition Poor. Access to inspect base - Not possible. Competition - Adjacent trees. Die-back - Upper crown. Decline - Evident / observed. Ivy or climbing plant. Unable to inspect tree closely due to dense scrub. Tree is infected with ash dieback.	26/04/2025	84.8	5.2	0-10	U
Tree T62	1 Fraxinus excelsior (Ash)	14.0	48	1		5.0		3.5		4.0		4.5	2.5		Early Mature	Structural condition Poor. Physiological condition Poor. Deadwood - Minor. Decay / structural defect - Base. Decay / structural defect - Major. Decay / structural defect - Bole. Foreign object. Ivy or climbing plant. Rope girdling branches in canopy. Fire damaged.	26/04/2025	104.2	5.8	0-10	U

Stem **green** Estimated value

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L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H63	1 Acer pseudoplatanus (Sycamore)	9.0	25 AVE	1									0.0		Mature	Structural condition Good. Physiological condition Good. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Good quality boundary treatment.	26/04/2025	28.3	3.0	20-40	B2
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
	1 Hedera helix (Common Ivy)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
Hedge H64	1 Rubus fruticosus s. (Blackberry/Bramble)	8.0	25 AVE	1									0.0		Mature	Structural condition Good. Physiological condition Good. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Good quality boundary treatment.	26/04/2025	28.3	3.0	20-40	B2
	1 Hedera helix (Common Ivy)																				
	1 Fraxinus excelsior (Ash)																				
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
	1 Acer pseudoplatanus (Sycamore)																				

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T65	1 Fraxinus excelsior (Ash)	7.5	20	1	3.0		3.0		3.0		3.0		0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Die-back - Upper crown. Epicormic growth - Base. Unable to inspect tree closely due to dense scrub. Tree is infected with ash dieback.	26/04/2025	18.1	2.4	10-20	C2
Tree T66	1 Fraxinus excelsior (Ash)	13.0	43 COM	3		4.0		5.0		5.0		3.0	1.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Competition - Adjacent trees. Ivy or climbing plant. Multi-stemmed. Unable to inspect tree closely due to dense scrub.	26/04/2025	84.8	5.2	10-20	C2
Tree T67	1 Fraxinus excelsior (Ash)	13.0	38	1		3.0		2.0		3.0		2.5	1.5		Early Mature	Structural condition Fair. Physiological condition Poor. Access to inspect base - Not possible. Competition - Adjacent trees. Die-back - Lower crown. Epicormic growth - Base. Ivy or climbing plant. Unable to inspect tree closely due to dense scrub. Tree is infected with ash dieback.	26/04/2025	65.3	4.6	10-20	C2
Tree T68	1 Fraxinus excelsior (Ash)	11.0	35	1	4.0		5.0		3.5		4.0		1.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Die-back - Upper crown. Epicormic growth - Base. Ivy or climbing plant. Unable to inspect tree closely due to dense scrub. Tree is infected with ash dieback.	26/04/2025	55.4	4.2	10-20	C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H69	1 Sambucus nigra (Elder)	3.5	15 AVE	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow dominated by brambles. Large gaps in areas and several semi-mature self-seeded ash trees with sparsely planted hawthorn and elder.	26/04/2025	10.2	1.8	20-40	C2
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Hedera helix (Common Ivy)																				
	1 Fraxinus excelsior (Ash)																				
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				

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Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H70	1 Crataegus monogyna (Common Hawthorn/Quick/May)	5.0	25 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Continuation of southern hedgerow but more densely planted. Group of sycamore and ash trees at southern end of group, none of which are significant. All trees growing or leaning over western side of ditch have been individually plotted. Remaining section of hedgerow is a typical native unmanaged hedge with significant bramble cover.	26/04/2025	28.3	3.0	20-40	C2
	1 Acer pseudoplatanus (Sycamore)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
	1 Hedera helix (Common Ivy)																				
	1 Fraxinus excelsior (Ash)																				
Hedge H71	1 Acer pseudoplatanus (Sycamore)	3.0	10 AVE	1									0.0		Early Mature	Structural condition Fair. Physiological condition Poor. Die-back - Upper crown. Decline - Evident / observed. Hedgerow - Neglected / overgrown. Root damage - Evident / observed. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Several trees in decline due to previous root damage, mostly within eastern side of group.	26/04/2025	4.5	1.2	0-10	U
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
	1 Fraxinus excelsior (Ash)																				
	1 Hedera helix (Common Ivy)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				

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Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H72	1	2.0	10	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Maintained. Height and stem diameter are average for group. Quantities of hedgerow not recorded. Hedgerow in neighbouring property.	26/04/2025	4.5	1.2	20-40	C2
Tree T74	1 Fraxinus excelsior (Ash)	8.0	20	1	3.0		2.5		3.0		5.0		1.5		Early Mature	Structural condition Fair. Physiological condition Fair. Competition - Adjacent trees. Tree growing on edge of western side of ditch.	26/04/2025	18.1	2.4	20-40	C2
Tree T75	1 Fraxinus excelsior (Ash)	7.0	17	1	2.5		3.0		2.0		3.0		2.5		Early Mature	Structural condition Fair. Physiological condition Poor. Competition - Adjacent trees. Die-back - Upper crown. Decline - Evident / observed. Deadwood - Minor. Tree growing on edge of eastern side of ditch and leaning into site. Tree is infected with ash dieback.	26/04/2025	13.1	2.0	0-10	U
Tree T76	1 Acer pseudoplatanus (Sycamore)	7.0	19	1	2.0		2.5		2.5		2.5		1.5		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Competition - Adjacent trees. Ivy or climbing plant. Tree growing on edge of eastern side of ditch.	26/04/2025	16.3	2.3	20-40	C2
Tree T77	1 Fraxinus excelsior (Ash)	7.0	14 COM	2		1.0		2.5		2.0		2.5	2.0		Early Mature	Structural condition Fair. Physiological condition Poor. Competition - Adjacent trees. Die-back - Upper crown. Unbalanced crown - Minor. Tree growing on edge of northern side of ditch. Tree is infected with ash dieback.	26/04/2025	9.0	1.7	0-10	U
Tree T78	1 Fraxinus excelsior (Ash)	10.0	40	1	5.0		4.0		5.0		3.0		2.0		Early Mature	Structural condition Fair. Physiological condition Poor. Branch weight - Heavy. Competition - Adjacent trees. Die-back - Upper crown. Decline - Evident / observed. Ivy or climbing plant. Root damage - Mammal. Raised surface roots. Tree growing on edge of northern side of ditch. Unable to inspect tree closely due to ivy cover. Tree is infected with ash dieback.	26/04/2025	72.4	4.8	0-10	U

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T79	1 Crataegus monogyna (Common Hawthorn/Quick/May)	7.0	48	1	5.0		4.5		5.0		5.0		1.0		Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Ivy or climbing plant. Tree growing on edge of northern side of ditch. Unable to inspect tree closely due to ivy cover. Unable to inspect tree closely due to dense scrub.	26/04/2025	104.2	5.8	20-40	C2
Tree T80	1 Fraxinus excelsior (Ash)	10.5	39 COM	7	5.0		4.5		5.0		3.5		2.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Competition - Adjacent trees. Coppice stool - Coppice origin / Mature stems. Ivy or climbing plant. Multi-stemmed. Tree growing on edge of northern side of ditch. Unable to inspect tree closely due to ivy cover.	26/04/2025	71.3	4.8	20-40	C2
Tree T81	1 Fraxinus excelsior (Ash)	8.0	24 COM	3	4.5		3.5		4.5		2.0		1.5		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Competition - Adjacent trees. Coppice stool - Regrown. Foreign object - Ingrown metal. Ivy or climbing plant. Tree growing on edge of northern side of ditch. Unable to inspect tree closely due to ivy cover.	26/04/2025	27.1	2.9	10-20	C2
Tree T82	1 Fraxinus excelsior (Ash)	9.0	24 COM	3	4.5		2.0		4.5		4.5		1.5		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Competition - Adjacent trees. Coppice stool - Regrown. Ivy or climbing plant. Tree growing on edge of northern side of ditch. Unable to inspect tree closely due to ivy cover.	26/04/2025	27.1	2.9	10-20	C2
Tree T83	1 Fraxinus excelsior (Ash)	9.0	28 COM	8		4.0		4.0		1.0		4.0	1.5		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Competition - Adjacent trees. Coppice stool - Regrown. Ivy or climbing plant. Multi-stemmed. Suppressed crown - Minor. Unbalanced crown - Minor. Tree growing on edge of northern side of ditch. Unable to inspect tree closely due to ivy cover.	26/04/2025	36.2	3.4	10-20	C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T84	1 Fraxinus excelsior (Ash)	9.0	33 COM	5		4.5		4.5		4.5		4.5	1.5		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Competition - Adjacent trees. Coppice stool - Regrown. Ivy or climbing plant. Multi-stemmed. Tree growing on edge of northern side of ditch. Unable to inspect tree closely due to ivy cover.	26/04/2025	50.9	4.0	10-20	C2
Hedge H85	1 Rubus fruticosus s. (Blackberry/Bramble)	4.0	15 AVE	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Shedding limb / limbs - Historic. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix.	26/04/2025	10.2	1.8	20-40	C2
	1 Hedera helix (Common Ivy)																				
	1 Fraxinus excelsior (Ash)																				
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
Hedge H87	1 Rubus fruticosus s. (Blackberry/Bramble)	1.5	5	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgreow line dominated by brambles.	26/04/2025	1.1	0.6	10-20	C2
Tree T88	1 Fraxinus excelsior (Ash)	12.0	45	1		4.5		2.0		4.5		6.0	1.5		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Branch weight - Heavy. Competition - Adjacent trees. Die-back - Upper crown. Ivy or climbing plant. Suppressed crown - Minor. Unbalanced crown - Minor. Tree growing on top of western ditch. Unable to inspect tree closely due to ivy cover. Tree is infected with ash dieback.	26/04/2025	91.6	5.4	10-20	C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

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L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T89	1 Fraxinus excelsior (Ash)	12.0	43 COM	3		4.5		5.0		4.5		2.5	2.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Restricted / obscured. Competition - Adjacent trees. Ivy or climbing plant. Suppressed crown - Minor. Unbalanced crown - Minor. Tree growing on top of western ditch. Unable to inspect tree closely due to ivy cover.	26/04/2025	84.8	5.2	20-40	C2
Tree T90	1 Fraxinus excelsior (Ash)	15.0	50	1	6.0		6.0	6.0		3.0			1.0		Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Competition - Adjacent trees. Ivy or climbing plant. Unable to inspect tree closely due to dense scrub. Unable to inspect tree closely due to ivy cover.	26/04/2025	113.1	6.0	20-40	C2
Tree T91	1 Fraxinus excelsior (Ash)	15.0	70	1	6.0		2.0	5.0		8.0			1.0		Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Branch weight - Heavy. Competition - Adjacent trees. Ivy or climbing plant. Unable to inspect tree closely due to dense scrub. Unable to inspect tree closely due to ivy cover.	26/04/2025	221.7	8.4	10-20	C2
Hedge H92	1 Rubus fruticosus s. (Blackberry/Bramble)	5.0	15 AVE	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Overgrown hedgerow with self-seeded ash and bramble cover.	26/04/2025	10.2	1.8	20-40	C2
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Hedera helix (Common Ivy)																				
	1 Fraxinus excelsior (Ash)																				
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				

Stem **green** Estimated value

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L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category	
					N	NE	E	SE	S	SW	W	NW										
Hedge H93	1	Acer pseudoplatanus (Sycamore)	5.0	25 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix.	26/04/2025	28.3	3.0	20-40	C2
	1																					
	1	Rubus fruticosus s. (Blackberry/Bramble)																				
	1	Sambucus nigra (Elder)																				
	1	x Cupressocyparis leylandii (Leyland Cypress)																				
Hedge H94	1	Crataegus monogyna (Common Hawthorn/Quick/May)	3.5	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Hedgerow - Neglected / overgrown. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix. Hedgerow is overgrown and has several gaps which are dominated by bramble.	14/08/2025	10.2	1.8	20-40	C2
	1	Hedera helix (Common Ivy)																				
	1	Rubus fruticosus s. (Blackberry/Bramble)																				
	1	Sambucus nigra (Elder)																				

Stem **green** Estimated value

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H95	1 Crataegus monogyna (Common Hawthorn/Quick/May)	1.5	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Native hedgerow overgrown with brambles. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix.	14/08/2025	10.2	1.8	20-40	C2
	1 Hedera helix (Common Ivy)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
Hedge H96	1 Crataegus monogyna (Common Hawthorn/Quick/May)	2.0	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Native hedgerow overgrown with brambles. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix.	14/08/2025	10.2	1.8	20-40	C2
	1 Hedera helix (Common Ivy)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				

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Stem **green** Estimated value

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H97	1 Hedera helix (Common Ivy)	2.0	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Small section of native hedgerow. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix.	14/08/2025	10.2	1.8	20-40	C2
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
Hedge H98	1 Crataegus monogyna (Common Hawthorn/Quick/May)	4.0	25 AVE	1									0.0		Mature	Structural condition Good. Physiological condition Good. Mature native field boundary hedgerow. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix.	14/08/2025	28.3	3.0	20-40	B2/B3
	1 Hedera helix (Common Ivy)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				

Stem **green** Estimated value

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L.B. Height of lowest branch attachment (m) - where relevant

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Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H99	1 Crataegus monogyna (Common Hawthorn/Quick/May)	2.0	15 AVE	1									0.0		Mature	Structural condition Fair. Physiological condition Fair. Native hedgerow, some gaps present. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix.	14/08/2025	10.2	1.8	20-40	C2
	1 Hedera helix (Common Ivy)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
Tree T100	1 Fraxinus excelsior (Ash)	10.0	55	1		5.0		6.0		4.5		5.0	1.0		Early Mature	Structural condition Fair. Physiological condition Fair. Access to inspect base - Not possible. Base / stems obscured - Vegetation. Deadwood - Minor. Ivy or climbing plant. Unable to inspect tree closely due to dense undergrowth.	14/08/2025	136.8	6.6	20-40	C2
Tree T101	1 Fraxinus excelsior (Ash)	8.0	40	1	3.5		4.0		3.5		4.0		2.0		Early Mature	Structural condition Poor. Physiological condition Poor. Die-back - Upper crown. Decay / structural defect in crown limb / limbs - Extensive. Deadwood - Minor. Tree is infected with ash dieback.	14/08/2025	72.4	4.8	0-10	U
Tree T102	1 Fraxinus excelsior (Ash)	11.0	40	1	3.0		4.0		4.0		4.0		2.0		Early Mature	Structural condition Fair. Physiological condition Fair. Deadwood - Minor. Ivy or climbing plant. Unable to inspect tree closely due to restricted access. Tree is infected with ash dieback.	14/08/2025	72.4	4.8	20-40	C2
Tree T103	1 Salix caprea (Goat Willow/Great Sallow)	8.0	40	1	4.0		5.0		2.0		3.5		2.0		Early Mature	Structural condition Fair. Physiological condition Good. Base / stems obscured - Vegetation. Leaning trunk - Minor. Suppressed crown - Minor. Unbalanced crown - Minor. Unable to inspect tree closely due to restricted access.	14/08/2025	72.4	4.8	20-40	C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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250401 - Flemington Lane

Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Hedge H104	1 Crataegus monogyna (Common Hawthorn/Quick/May)	5.0	25 AVE	1									0.0		Mature	Structural condition Good. Physiological condition Good. Mature mixed native field boundary hedgerow. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix.	14/08/2025	28.3	3.0	20-40	B2/B3
	1 Fraxinus excelsior (Ash)																				
	1 Hedera helix (Common Ivy)																				
	1 Ilex aquifolium (Holly)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				
	1 Salix caprea (Goat Willow/Great Sallow)																				
	1 Prunus domestica (Plum)																				
Tree T105	1 Fagus sylvatica (Common Beech)	10.0	30	1	4.0	5.5	4.0	2.0					1.0		Early Mature	Structural condition Fair. Physiological condition Fair. Die-back - Upper crown. Leaning trunk - Minor. Suppressed crown - Minor. Unbalanced crown - Minor.	14/08/2025	40.7	3.6	10-20	C2

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

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250401 - Flemington Lane

Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Tree T106	1 Fraxinus excelsior (Ash)	9.0	30	1	4.5		4.0		4.5		4.5		2.0		Early Mature	Structural condition Fair. Physiological condition Poor. Access to inspect base - Restricted / obscured. Base / stems obscured - Vegetation. Die-back - Upper crown. Deadwood - Minor. Tree is infected with ash dieback. Unable to inspect tree closely due to dense undergrowth.	14/08/2025	40.7	3.6	10-20	C2
Group G107	1 Crataegus monogyna (Common Hawthorn/Quick/May)	12.0	25 AVE	1									0.0		Early Mature	Structural condition Fair. Physiological condition Fair. Competition - Adjacent trees. Die-back - Upper crown. Decline - Evident / observed. Deadwood - Minor. Ivy or climbing plant. Tree and hedge line containing an overstorey of ash and understorey of hawthorn and brambles. Gaps present within hedgerow. Ash trees are generally in poor condition and Category U. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix.	14/08/2025	28.3	3.0	10-20	C2
	1 Fraxinus excelsior (Ash)																				
	1 Hedera helix (Common Ivy)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

Tree ID	No.	Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
						N	NE	E	SE	S	SW	W	NW									
Hedge H108	1	Crataegus monogyna (Common Hawthorn/Quick/May)	5.0	25 AVE	1								0.0		Mature	Structural condition Good. Physiological condition Good. Mature mixed native field boundary hedgerow. Height and stem diameter are average for group. Quantities of hedgerow not recorded, only species mix.	14/08/2025	28.3	3.0	20-40	B2/B3	
	1	Hedera helix (Common Ivy)																				
	1	Ilex aquifolium (Holly)																				
	1	Prunus domestica (Plum)																				
	1	Prunus spinosa (Blackthorn/Sloe)																				
	1	Rubus fruticosus s. (Blackberry/Bramble)																				

Stem **green** Estimated value
Stem **AVE** Average stem diameter for tree groups
Stem **COM** Combined stem diameter in accordance with BS5837
L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

250401 - Flemington Lane

Tree ID	No. Species	Height (m)	Stem diameter (cm)	No. of Stems	CROWN SPREAD (m)								Crown clearance (m)	L.B. (m)	Life stage	Condition Notes	Survey date	RPA (m ²)	RPR (m)	Life expectancy (yrs)	BS Category
					N	NE	E	SE	S	SW	W	NW									
Group G109	1 Acer campestre (Field Maple)	4.0	14 AVE	1									0.0		Semi Mature	Structural condition Good. Physiological condition Good. Semi-mature shelterbelt planting containing a mix of native species. Height and stem diameter are average for group. Quantities not recorded, only species mix.	14/08/2025	8.9	1.7	40+	C2
	1 Cerasus avium (Wild Cherry)																				
	1 Corylus avellana (Common Hazel)																				
	1 Crataegus monogyna (Common Hawthorn/Quick/May)																				
	1 Fraxinus excelsior (Ash)																				
	1 Prunus spinosa (Blackthorn/Sloe)																				
	1 Rubus fruticosus s. (Blackberry/Bramble)																				

Stem **green** Estimated value

Stem **AVE** Average stem diameter for tree groups

Stem **COM** Combined stem diameter in accordance with BS5837

L.B. Height of lowest branch attachment (m) - where relevant

The survey information in this schedule has been gathered following a BS5837 survey for planning purposes. Where hazardous trees have been noted recommendations for works may have been made but this survey cannot be relied upon as a full health and safety assessment of the trees.

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Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	* Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) * Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline * Trees infected with pathogens of significance to health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7	RED		
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
Category A Trees of high quality with an estimated remaining life expectancy of at least 40 years	Tree that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue).	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture).	GREEN
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation.	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.	Trees with material conservation or other cultural value.	BLUE
Category C Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits.	Trees with no material conservation or other cultural value.	GREY

250401-PD-12-A - Planning Tree Works Schedule

250401 - Flemington Lane

CHARLES MCCORKELL
ARBORICULTURAL CONSULTANCY

ID	No. / Species	BS5837 Category	Purpose of works Recommended works	Status
H1	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	C2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
	1 <i>Sambucus nigra</i> Elder			
H2	1 <i>other</i> Other	C2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May			
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
	1 <i>Salix caprea</i> Goat Willow/Great Sallow			
	1 <i>Sambucus nigra</i> Elder			
H3	1 <i>other</i> Other	C2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May			
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
	1 <i>Salix caprea</i> Goat Willow/Great Sallow			
	1 <i>Sambucus nigra</i> Elder			
T4	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T6	1 <i>Fraxinus excelsior</i> Ash	U	To facilitate development Fell - Ground level.	Proposed
T7	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed

ID	No. / Species	BS5837 Category	Purpose of works Recommended works	Status
H8	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	C2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rubus fruticosus</i> s. Blackberry/Bramble			
H9	1 <i>other</i> Other	C2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May			
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Rosa canina</i> Dog-rose			
	1 <i>Rubus fruticosus</i> s. Blackberry/Bramble			
	1 <i>Salix caprea</i> Goat Willow/Great Sallow			
	1 <i>Sambucus nigra</i> Elder			
T10	1 <i>Acer pseudoplatanus</i> Sycamore	C1/C2	To facilitate development Fell - Ground level.	Proposed
H11	1 <i>other</i> Other	C2	To facilitate development Fell - Ground level.	Proposed
	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May			
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rosa canina</i> Dog-rose			
	1 <i>Rubus fruticosus</i> s. Blackberry/Bramble			
	1 <i>Salix caprea</i> Goat Willow/Great Sallow			
	1 <i>Sambucus nigra</i> Elder			
T12	1 <i>Acer pseudoplatanus</i> Sycamore	C1/C2	To facilitate development Fell - Ground level.	Proposed

ID	No. / Species	BS5837 Category	Purpose of works Recommended works	Status
H13	1 <i>Acer pseudoplatanus</i> Sycamore	C2	To facilitate development Fell - Ground level.	Proposed
	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May			
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rosa canina</i> Dog-rose			
	1 <i>Rubus fruticosus</i> s. Blackberry/Bramble			
	1 <i>Sambucus nigra</i> Elder			
H14	1 <i>Prunus spinosa</i> Blackthorn/Sloe	C2	To facilitate development Fell - Ground level.	Proposed
	1 <i>Rubus fruticosus</i> s. Blackberry/Bramble			
T15	1 <i>Prunus spinosa</i> Blackthorn/Sloe	C2	To facilitate development Fell - Ground level.	Proposed
H16	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	C2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Rubus fruticosus</i> s. Blackberry/Bramble			
	1 <i>Sambucus nigra</i> Elder			
T19	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T20	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T21	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T22	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T23	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T24	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T25	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T26	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed

ID	No. / Species	BS5837 Category	Purpose of works Recommended works	Status
T27	1 <i>Fraxinus excelsior</i> Ash	U	To facilitate development Fell - Ground level.	Proposed
T28	1 <i>Fraxinus excelsior</i> Ash	U	To facilitate development Fell - Ground level.	Proposed
H29	1 <i>other</i> Other	C2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May			
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
H44	1 <i>other</i> Other	B2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May			
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
	1 <i>Sambucus nigra</i> Elder			
H46	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	C2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
T47	1 <i>Acer pseudoplatanus</i> Sycamore	B2	To facilitate development Fell - Ground level.	Proposed
T48	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T49	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
H50	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	C2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
T51	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed

ID	No. / Species	BS5837 Category	Purpose of works Recommended works	Status
T52	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T54	1 <i>Acer pseudoplatanus</i> Sycamore	C2	To facilitate development Fell - Ground level.	Proposed
T55	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T56	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
H57	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May 1 <i>Griselinia littoralis</i> 1 <i>Ligustrum ovalifolium</i> Privet/Garden Privet	C2	To facilitate development Fell - Ground level.	Proposed
T58	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	C2	To facilitate development Fell - Ground level.	Proposed
T59	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
H60	1 <i>Fraxinus excelsior</i> Ash 1 <i>Rubus fruticosus</i> s. Blackberry/Bramble	C2	To facilitate development Fell - Ground level.	Proposed
T61	1 <i>Fraxinus excelsior</i> Ash	U	To facilitate development Fell - Ground level.	Proposed
T62	1 <i>Fraxinus excelsior</i> Ash	U	To facilitate development Fell - Ground level.	Proposed
H63	1 <i>Acer pseudoplatanus</i> Sycamore 1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May 1 <i>Hedera helix</i> Common Ivy 1 <i>Rubus fruticosus</i> s. Blackberry/Bramble	B2	To facilitate development Fell - Ground level.	Proposed

ID	No. / Species	BS5837 Category	Purpose of works Recommended works	Status
H64	1 <i>Acer pseudoplatanus</i> Sycamore	B2	To facilitate development Reduce lateral limb / limbs. Reduce lateral growth back from the proposed dwelling boundary. Extent of works to be agreed on site.	Proposed
	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May			
	1 <i>Fraxinus excelsior</i> Ash			
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
T65	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T66	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T67	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
T68	1 <i>Fraxinus excelsior</i> Ash	C2	To facilitate development Fell - Ground level.	Proposed
H69	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	C2	To facilitate development Fell - Ground level.	Proposed
	1 <i>Fraxinus excelsior</i> Ash			
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
	1 <i>Sambucus nigra</i> Elder			
H71	1 <i>Acer pseudoplatanus</i> Sycamore	U	To facilitate development Fell - Ground level. Part removal/prune back to facilitate the sightlines as per the Tree Removals Plan	Proposed
	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May			
	1 <i>Fraxinus excelsior</i> Ash			
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			

ID	No. / Species	BS5837 Category	Purpose of works Recommended works	Status
H92	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	C2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Fraxinus excelsior</i> Ash			
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
H94	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	C2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
	1 <i>Sambucus nigra</i> Elder			
H95	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	C2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
H96	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	C2	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
H98	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	B2/B3	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
T101	1 <i>Fraxinus excelsior</i> Ash	U	To facilitate development Fell - Ground level.	Proposed

ID	No. / Species	BS5837 Category	Purpose of works Recommended works	Status
H104	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	B2/B3	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Fraxinus excelsior</i> Ash			
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Ilex aquifolium</i> Holly			
	1 <i>Prunus domestica</i> Plum			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
	1 <i>Salix caprea</i> Goat Willow/Great Sallow			
T105	1 <i>Fagus sylvatica</i> Common Beech	C2	To facilitate development Fell - Ground level.	Proposed
H108	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May	B2/B3	To facilitate development Fell - Ground level. Part removal of hedgerow as shown on Tree Removals Plan.	Proposed
	1 <i>Hedera helix</i> Common Ivy			
	1 <i>Ilex aquifolium</i> Holly			
	1 <i>Prunus domestica</i> Plum			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			
G109	1 <i>Acer campestre</i> Field Maple	C2	To facilitate development Fell - Ground level. Part removal of tree group as shown on Tree Removals Plan.	Proposed
	1 <i>Cerasus avium</i> Wild Cherry			
	1 <i>Corylus avellana</i> Common Hazel			
	1 <i>Crataegus monogyna</i> Common Hawthorn/Quick/May			
	1 <i>Fraxinus excelsior</i> Ash			
	1 <i>Prunus spinosa</i> Blackthorn/Sloe			
	1 <i>Rubus fruticosus s.</i> Blackberry/Bramble			

Appendix B - Plans

Document	Reference	Revision
Tree Survey Plan 01	250401-P-10-01	A
Tree Survey Plan 02	250401-P-10-02	A
Tree Removal Plan 01	250401-P-11-01	A
Tree Removal Plan 02	250401-P-11-02	A
Tree Protection Plan 01	250401-P-12-01	A
Tree Protection Plan 02	250401-P-12-02	A

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