

TRANSPORT TECHNICAL NOTE

JOB REF. CLIENT
LS/TV/32513 Esquire Developments Ltd

SITE
Land at Rose Farm, Istead Rise, Gravesham

JOB NAME
Response to National Highways

1.1 INTRODUCTION

- 1.1.1 This Transport Technical Note (TN) has been produced in response to the representation received from National Highways (NH) dated 20th April 2026, in relation to the outline planning application for a residential development of 154 dwellings with all matters reserved except for access (Planning Application Reference: GB/20251233) at Land at Rose Farm, in Istead Rise, Gravesham.
- 1.1.2 This TN addresses the substantive points raised within NH's representation, a copy of which is included at **Appendix A** for reference.

1.2 COMMENTARY

- 1.2.1 NH has stated the following:

"The A2 eastbound off-flow traffic flows should be reviewed, currently the 2030 Do Nothing flow is higher than the 2030 Do Minimum flow.

The model results will be reviewed once the traffic flows are clarified, currently the results show A2 eastbound off-slip performs better with 2030 Do Minimum than with 2030 Do Nothing.

2030 Do Nothing PM traffic flows on arm 1 (A20 westbound off-slip) do not align with Figure 13 contained within TA Appendix P"

- 1.2.2 The traffic flow diagrams and modelling outputs have been updated to address the above minor errors and are included at **Appendix B** and **Appendix C**, respectively.
- 1.2.3 The modelling outputs were sent to NH for review and confirmation was received (see **Appendix D**) that the eastbound off-slip 2030 Do Nothing flows have now

been corrected and that the A2 westbound off-slip 2030 Do Nothing PM traffic flows have been corrected to align with Figure 13 contained within Appendix P of the Transport Assessment.

- 1.2.4 As requested by NH, updated traffic flow diagrams have been produced and are included at **Appendix B** for the corresponding scenarios within the modelling outputs.

- 1.2.5 NH has further stated the following:

"We note that the Former Tollgate Hotel planning application (reference 20240856) contains an interim mitigation scheme at this junction, as shown on approved drawing ref: 22052-MA-XX-DR C-0102 P07 and referred to within the decision notice. We note that this scheme has not been assessed, therefore assessment of this mitigation should be included to determine if this is sufficient to address the impacts of the current planning application."

"We note Former Tollgate Hotel utilised lane simulation within the Junctions model, thereby allowing the impact of revision in lanes to be determined."

- 1.2.6 NH has accepted that the LinSig assessment of the proposed final signalised 'teardrop' mitigation scheme for the southern roundabout demonstrates that the mitigation would operate satisfactorily, with no significant impact on the Strategic Road Network arising from the development proposals.
- 1.2.7 Notwithstanding the above, and further to the modelling of the proposed signalised 'teardrop' arrangement at the southern roundabout, NH has requested that the proposed interim mitigation scheme at the A227 / A2 roundabout junction is also assessed.
- 1.2.8 This request arises from concerns regarding the delivery of the 'teardrop' mitigation scheme required as part of the approved application for 400 dwellings at Land at Coldharbour Road (Reference: GR20141214). Condition 34 of that outline permission required the works to be implemented prior to occupation of the 200th dwelling; however, the site has now been fully constructed and occupied for some time and the mitigation is yet to be delivered.
- 1.2.9 As set out in the correspondence with NH included at **Appendix D** and given that the implementation of the Coldharbour Road mitigation scheme remains unconfirmed, consideration has therefore been given to an interim mitigation scheme associated with the Former Tollgate Hotel application (Reference: 20240856). That application, which relates to an arm off the northern A2 / A227 roundabout, was approved for the redevelopment of the former hotel site to a petrol filling station and encountered similar issues regarding the delivery of the signalised mitigation scheme. In response, an interim mitigation scheme was identified by the applicant's transport consultants.

- 1.2.10 The interim mitigation scheme proposes the removal of existing westbound off-slip lane markings to enable both lanes to be used by vehicles travelling north, including the removal of the left-turn-only arrow and the provision of appropriate circulatory markings on the roundabout. To assess this arrangement, the Former Tollgate Hotel application utilised the advanced 'lane simulation mode' within the Junctions software package, which enabled a more detailed assessment of lane choice behaviour, queuing and vehicle interaction than standard deterministic modelling.
- 1.2.11 The assessment demonstrated that the interim mitigation scheme provided a beneficial impact, and a planning condition was imposed requiring its implementation prior to occupation. NH have therefore requested that this assessment approach be replicated for the current development proposals.
- 1.2.12 For clarity, modelling of the existing junction arrangement demonstrates that the development proposals would result in only a negligible increase in traffic movements at the A2 / A227 roundabout. However, the operation of the A2 westbound off-slip has historically been a concern for NH due to the potential for queuing to extend back onto the A2 main carriageway. Accordingly, any increase in queuing is perceived as a potential highway safety risk, necessitating consideration of mitigation.
- 1.2.13 The assessment of the interim mitigation scheme has therefore been replicated from the analysis contained within the document titled "*Technical Note Response to KCC Highways and Transportation and National Highways*", submitted on 1st April 2025 (Part 2, Appendix H). The modelling outputs have been updated accordingly and are presented at **Appendix C**, with a summary provided in Table 1 overleaf and the detailed results included at **Appendix E**.

2023 Base				
Southern Roundabout	AM Peak		PM Peak	
	Delay (s)	Q (PCU)	Delay (s)	Q (PCU)
Westbound Off-Slip	16.15	3.3	31.15	6.2
A227 South	13.67	3.1	9.73	2.9
A227 N	7.98	2.9	6.29	2.2
2030 Do Nothing				
Southern Roundabout	AM Peak		PM Peak	
	Delay (s)	Q (PCU)	Delay (s)	Q (PCU)
Westbound Off-Slip	50.76	11.8	127.1	31.0
A227 South	27.93	6.9	13.75	4.0
A227 N	12.54	4.7	7.57	3.2
2030 Do Minimum				
Southern Roundabout	AM Peak		PM Peak	
	Delay (s)	Q (PCU)	Delay (s)	Q (PCU)
Westbound Off-Slip	51.43	12.9	153.69	37.8
A227 South	34.76	10.6	13.54	3.5
A227 N	12.79	4.8	7.60	3.5

TABLE 1: A227 WROTHAM ROAD / A2 JUNCTION – INTERIM MITIGATION SCHEME – ARCADY SUMMARY

- 1.2.14 For clarity, the A2 westbound off-slip is approximately 400m in length prior to rejoining the main A2 carriageway and can accommodate approximately 67 vehicles, based on an average car length of 6m. The proposed development would have a negligible effect on queuing on the westbound off-slip when comparing the difference between the Do Nothing and Do Minimum scenarios, resulting in an increase of approximately one vehicle in the AM peak hour and seven vehicles in the PM peak hour. Given the available storage capacity, these increases can be comfortably accommodated within the existing slip road without affecting the main A2 carriageway. It is therefore considered that the development proposals can be satisfactorily accommodated within the proposed interim mitigation scheme.
- 1.2.15 It is recommended that a suitably worded planning condition is attached to any future consent, in line with Condition 26 of the recently approved Former Tollgate Hotel application, requiring the improvement works shown on approved drawing reference '22052-MA-XX-DR-C-0102 P07' to be completed and operational prior to occupation. Any such condition should also clarify that should the permanent signalised scheme be implemented prior to occupation of the development, the interim mitigation scheme would no longer be required.

1.3 CONCLUSION

- 1.3.1 It is considered that the above information sufficiently addresses the outstanding matters raised in the representation from National Highways.

APPENDIX A





National Highways Planning Response (NHPR 25-01) Formal Recommendation to an Application for Planning Permission

From: Hermes Luli (Head of Planning & Development)
Operations Directorate
South East Region
National Highways
PlanningSE@nationalhighways.co.uk

To: Gravesham Borough Council (FAO Adeoye Lawal)
Planning.reps@gravesham.gov.uk

CC: transportplanning@dft.gov.uk
spatialplanning@nationalhighways.co.uk

Council's Reference: 20251233

Location: Land At Rose Farm, Downs Road, Istead Rise, Gravesend Kent

Proposal: Outline planning application for the demolition of 64 Downs Road and erection of up to 154 No. residential dwellings (including affordable housing), with all matters reserved except for access. Creation of a new access from Downs Road.

National Highways Ref: NH/26/14373

Referring to the consultation on a planning application dated 5 January 2026 referenced above, in the vicinity of the A2 that forms part of the Strategic Road Network, notice is hereby given that National Highways formal recommendation is that we:

- ~~a) offer no objection (see reasons at Annex A);~~
- ~~b) recommend that conditions should be attached to any planning permission that may be granted (see Annex A – National Highways recommended Planning Conditions & reasons);~~
- c) recommend that planning permission not be granted for a specified period (see reasons at Annex A);**
- ~~d) recommend that the application be refused (see reasons at Annex A)~~

Highways Act 1980 Section 175B is not relevant to this application.¹

This represents National Highways' formal recommendation and is copied to the Department for Transport as per the terms of our Licence.

Should the Local Planning Authority propose not to determine the application in accordance with this recommendation they are required to consult the Secretary of State for Transport, as set out in the [Town and Country Planning \(Development Affecting Trunk Roads\) Direction 2018](#), via transportplanning@dft.gov.uk and may not determine the application until the consultation process is complete.

The Local Planning Authority must also copy any consultation under the 2018 Direction to PlanningSE@nationalhighways.co.uk.

This response and all comments outlined herein are made in respect of planning matters only in National Highways' position as a statutory planning consultee, and does not confer any proprietary rights nor amount to the giving or refusal of consent, assent, approval, or awareness of or by National Highways in or of any other aspects or matters (including, but not limited to, the use of property belonging to National Highways). If anyone wishes for National Highways to consider any aspects which do not relate to planning submissions, they should call our contact centre on 0300 123 5000.

Signature:		Date: 17 April 2026				
<table style="width: 100%; border-collapse: collapse;"><tr><td style="width: 50%;">Name: Bidur Rajbhandari</td><td style="width: 50%;">Position: Assistant Spatial Planner</td></tr><tr><td colspan="2" style="padding-top: 10px;">National Highways Ground Floor, Building 1000, Cathedral Square, Guildford GU2 7YL www.nationalhighways.co.uk</td></tr></table>			Name: Bidur Rajbhandari	Position: Assistant Spatial Planner	National Highways Ground Floor, Building 1000, Cathedral Square, Guildford GU2 7YL www.nationalhighways.co.uk	
Name: Bidur Rajbhandari	Position: Assistant Spatial Planner					
National Highways Ground Floor, Building 1000, Cathedral Square, Guildford GU2 7YL www.nationalhighways.co.uk						

Annex A National Highways' assessment of the proposed development

National Highways has been appointed by the Secretary of State for Transport as a strategic highway company under the provisions of the Infrastructure Act 2015 and is the highway authority, traffic authority and street authority for the Strategic Road Network (SRN). The SRN is a critical national asset and as such we work to ensure that it operates and is managed in the public interest, both in respect of current

¹ Where relevant, further information will be provided within Annex A.

activities and needs as well as in providing effective stewardship of its long-term operation and integrity.

Recommend that planning permission not be granted for a specified period:

It is recommended that the application should not be determined for a period of three months until **17 July 2026** to address our comments below.

National Highways had been consulted by the applicant during pre-application stage with a Transport Scoping Note prepared by DHA dated May 2025. NH had made the following comments:

- *Collision analysis to be undertaken at A27 / A227 Wrotham Road junction*
- *Details to be provided of the measures which are proposed to achieve the aims of the vision*
- *Junction assessment to be undertaken at A2 / A227 Wrotham Road junction*
- *Junctions 2025 base model to be calibrated against the highest 15-minute average queue on each arm in each assessment period using direct intercept adjustment*
- *Assessment to be undertaken at year 2028, any TEMPro alternative assumptions to be clearly documented, the LPA should be consulted on committed development for inclusion in assessment and provided to National Highways for review*
- *Assessment to be undertaken both without and with the committed highway mitigation scheme*

National Highways was consulted by GBC on 5 January 2026 and requested to review a Transport Assessment (TA) and an Interim Travel Plan (ITP) both prepared by DHA and dated November 2025.

NH undertook review of the submitted TA and ITP and had the following comments:

- Collision analysis to be undertaken at A27 / A227 Wrotham Road junction
- Committed development assumptions to be clarified with the LPA
- Traffic flow diagrams to be provided
- Junction assessment to be revised

We have reviewed Transport Technical Note (TTN) prepared by DHA and dated March 2026 and our comments are provided below.

This recommendation can be replaced, renewed, or reviewed during the three-month period, or at its end, dependent on progress made with regards to the outstanding matters.

Reasons

Throughout this response **ACTION points** for the applicant are highlighted in **underlined bold**.

Traffic Flow Diagrams

We previously noted that the 2023 Base traffic flows consistent with the Former Tollgate Hotel planning application should be provided, ensuring alignment with the model inputs. The 2023 Base traffic flows are confirmed to be contained within Appendix D of the TTN, with the remaining traffic flow diagrams being contained within Appendix P of the TA.

The A2 eastbound off-flow traffic flows should be reviewed, currently the 2030 Do Nothing flow is higher than the 2030 Do Minimum flow.

Junction Assessment

The TTN contains updated junction assessment at the A2 / A227 Wrotham Road junction, comprising the north and south dumbbell roundabouts.

A227 Wrotham Road / A2 Eastbound off-slip Roundabout

The submitted Junctions 11 input files have been reviewed and are confirmed to align with the Junctions 11 PDFs contained within Appendix D of the TTN.

The geometry provided within the submitted Junctions 11 models has been reviewed and we note the following:

- Former Tollgate Hotel Site Access – we previously noted that the assessment had been undertaken based on the proposed site access associated with planning application 20240856, this has now been revised to reflect the existing geometry and is confirmed to be acceptable

The demand sets within the Junctions models have been reviewed and we note the following:

- 2023 Base traffic flows consistent with the Former Tollgate Hotel 2023 MCC have been included within the models as previously requested

We previously noted that base models are required to be calibrated against the highest 15-minute average queue on each arm in each assessment period. The AM and PM models are confirmed to include 'direct intercept' adjustment to ensure acceptable calibration for both peak periods.

The model results will be reviewed once the traffic flows are clarified, currently the results show A2 eastbound off-slip performs better with 2030 Do Minimum than with 2030 Do Nothing.

A227 Wrotham Road / A2 Westbound off-slip Roundabout

The submitted Junctions 11 input files have been reviewed and are confirmed to align with the Junctions 11 PDFs contained within Appendix D of the TTN.

The geometry provided within the Junctions models has been reviewed and we note the following:

- A20 westbound off-slip – the approach road half-width has been revised from 5m to 3.7m as previously requested

The demand sets within the Junctions models have been reviewed and we note the following:

- 2023 Base traffic flows consistent with the Former Tollgate Hotel 2023 MCC have been included within the models as previously requested
- **2030 Do Nothing PM traffic flows on arm 1 (A20 westbound off-slip) do not align with Figure 13 contained within TA Appendix P**

We previously noted that base models are required to be calibrated against the highest 15-minute average queue on each arm in each assessment period. The AM and PM models are confirmed to include 'direct intercept' adjustment to ensure acceptable calibration for both peak periods.

The results demonstrate significant impact on the A2 westbound off-slip as a result of the proposed development, with the 2030 AM queue increasing from 194 passenger car units (PCU) to 202 PCU because of the proposed development. **As the development causes an increase in stationary traffic on the A2 mainline this is a significant safety concern which is required to be addressed.**

A227 Wrotham Road / A2 Westbound off-slip Roundabout Interim Mitigation

We note that the Former Tollgate Hotel planning application (reference 20240856) contains an interim mitigation scheme at this junction, as shown on approved drawing ref: 22052-MA-XX-DR C-0102 P07 and referred to within the decision notice. **We note that this scheme has not been assessed, therefore assessment of this mitigation should be included to determine if this is sufficient to address the impacts of the current planning application.**

We note Former Tollgate Hotel utilised lane simulation within the Junctions model, thereby allowing the impact of revision in lanes to be determined.

A227 Wrotham Road / A2 Westbound off-slip Roundabout Final Mitigation

We acknowledge the updated LinSig assessment of the final mitigation scheme has been submitted and we note the following:

- We previously noted that the proposed pedestrian crossing should be included within the traffic signal phasing, this has not been included

The traffic flows and scenarios within the submitted LinSig model have been reviewed and we note the following:

- The naming of the six traffic flow matrices has been revised as requested
- 2030 Do Minimum PM – A227 Wrotham Road (south) left-turn traffic flow has been omitted
- The traffic flow matrices have been assigned to scenarios as requested

The results within the submitted LinSig model have been reviewed and we note that:

- The submitted LinSig model contain results which align with the TA

The LinSig modelling results currently demonstrate the proposed final mitigation operates satisfactorily with no significant impact on the SRN as a result of the proposed development. While we have noted a number of matters above, in our view the omission of the pedestrian crossing and the traffic flow issues would not materially affect the results. It is therefore not necessary for any additional refinement associated with the modelling of the final mitigation scheme.

Construction Traffic Management Plan

At the appropriate stage of the planning process, National Highways will recommend a suitable planning condition in relation to the preparation, agreement, and adherence to a Construction Traffic Management Plan (CTMP).

Standing advice to the local planning authority

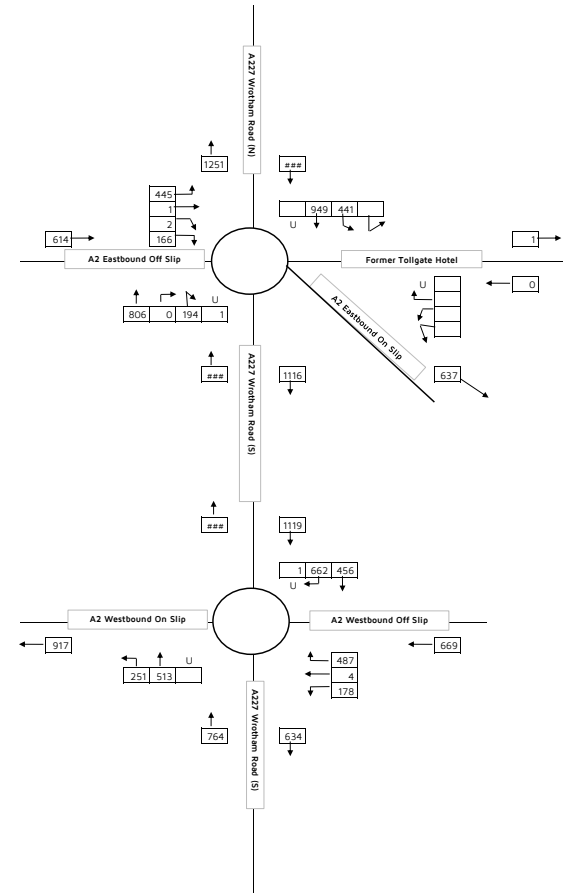
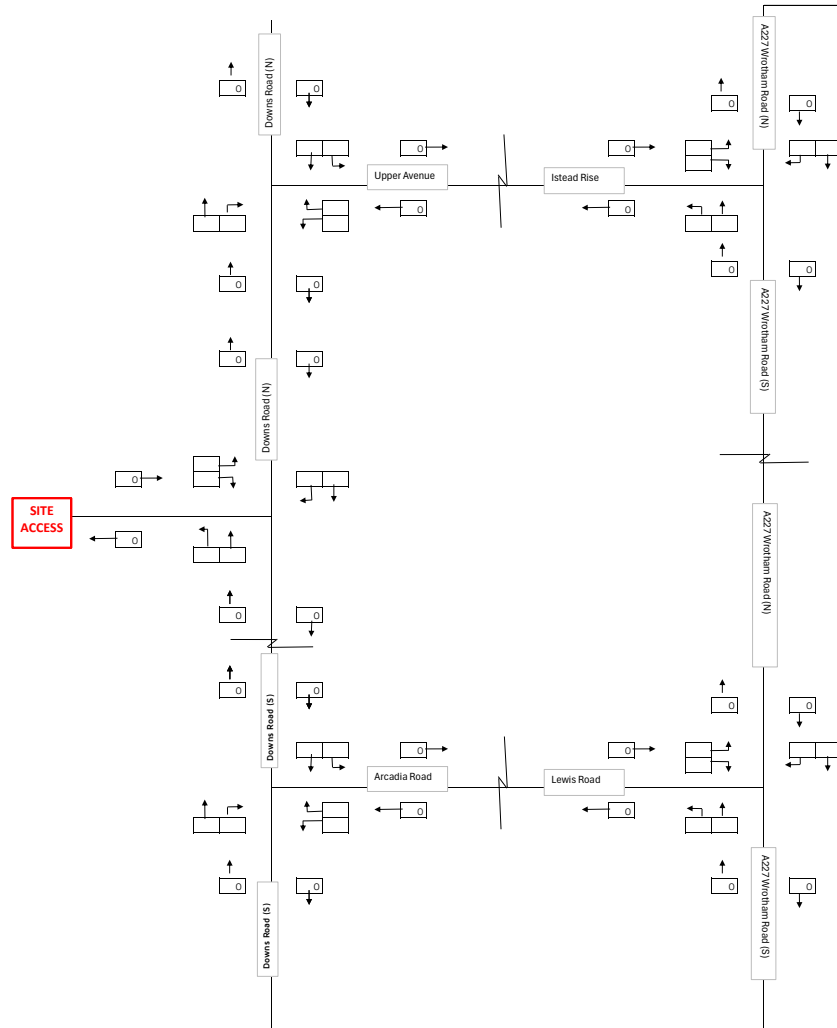
The Climate Change Committee's [2022 Report to Parliament](#) notes that for the UK to achieve net zero carbon status by 2050, action is needed to support a modal shift away from car travel. The NPPF supports this position, with paragraphs 77 and 110 prescribing that significant development should offer a genuine choice of transport modes, while paragraphs 109 to 116 etc advise that appropriate opportunities to promote walking, cycling and public transport should be taken up as part of a vision-led approach.

Moreover, the carbon reduction hierarchy (avoid-switch-improve) as set out in clause 4.3 of PAS2080:2023 promotes approaches and measures to minimise resource consumption and thereby reduce carbon emissions.

These considerations should be weighed alongside any relevant Local Plan policies to ensure that planning decisions are in line with the necessary transition to net zero carbon.

APPENDIX B

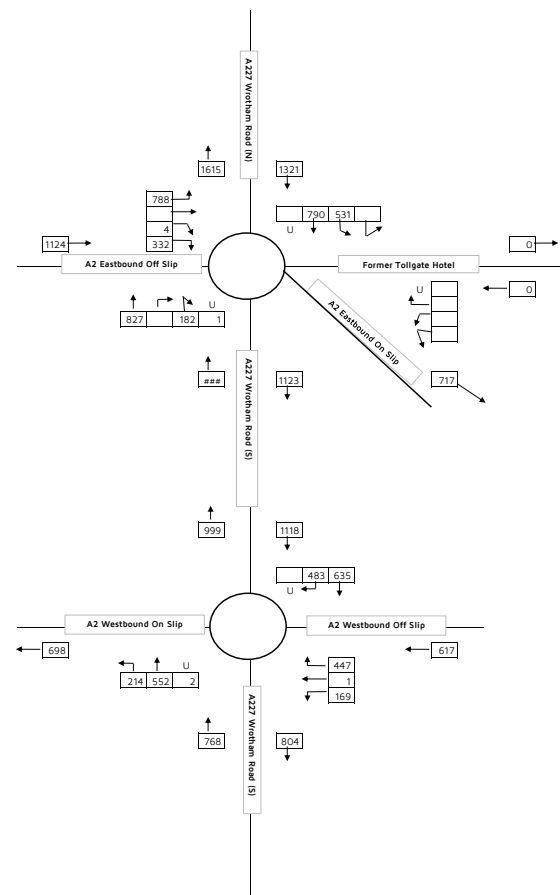


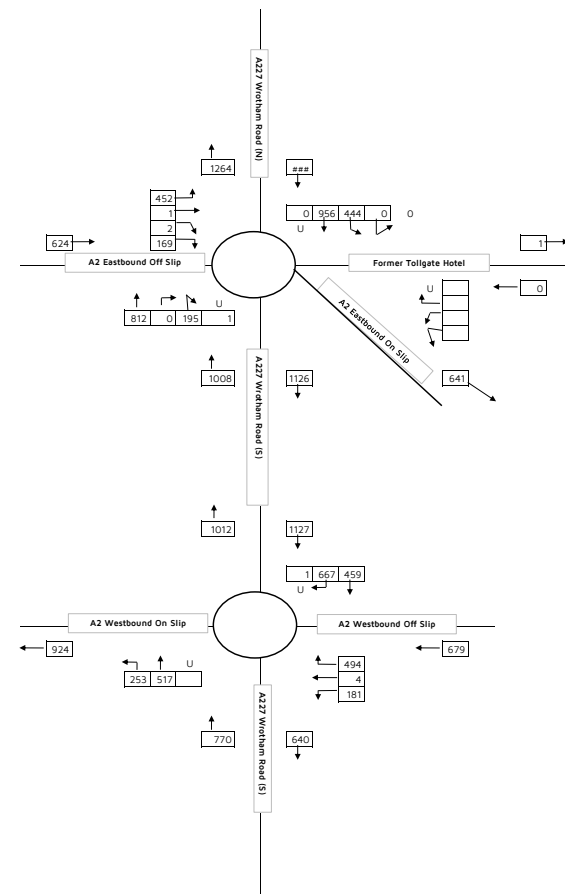
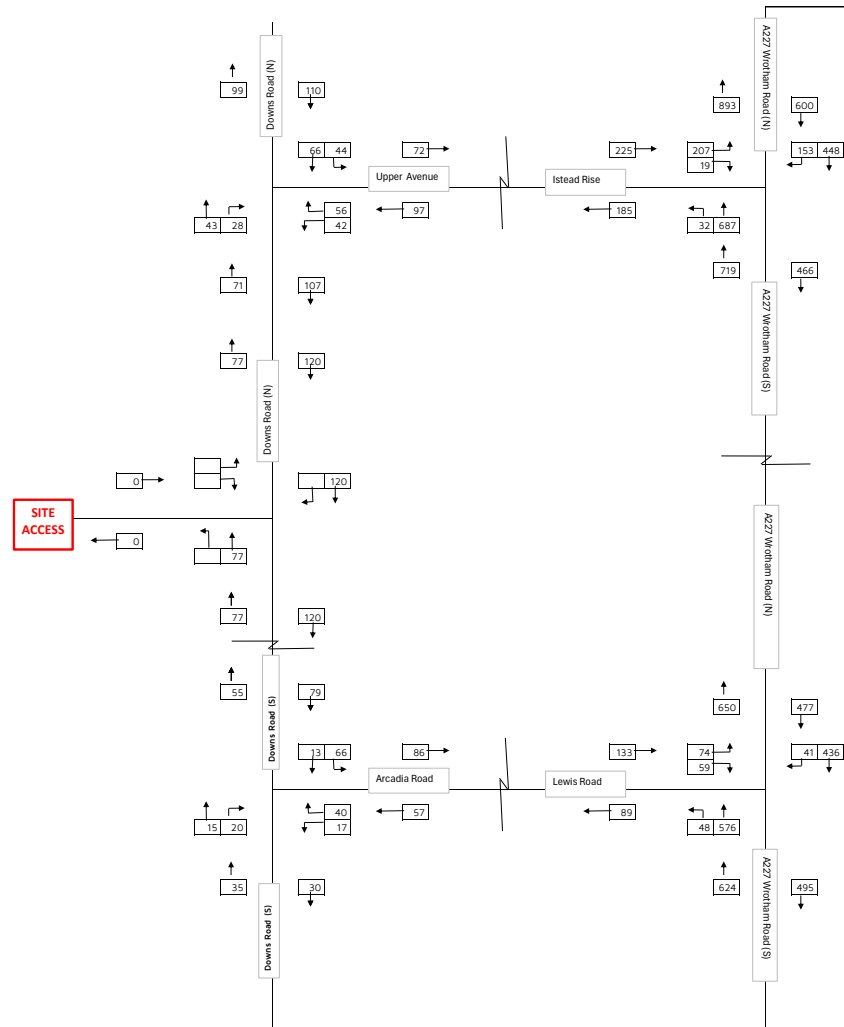


Rose Farm
2023 AM Base

FIG





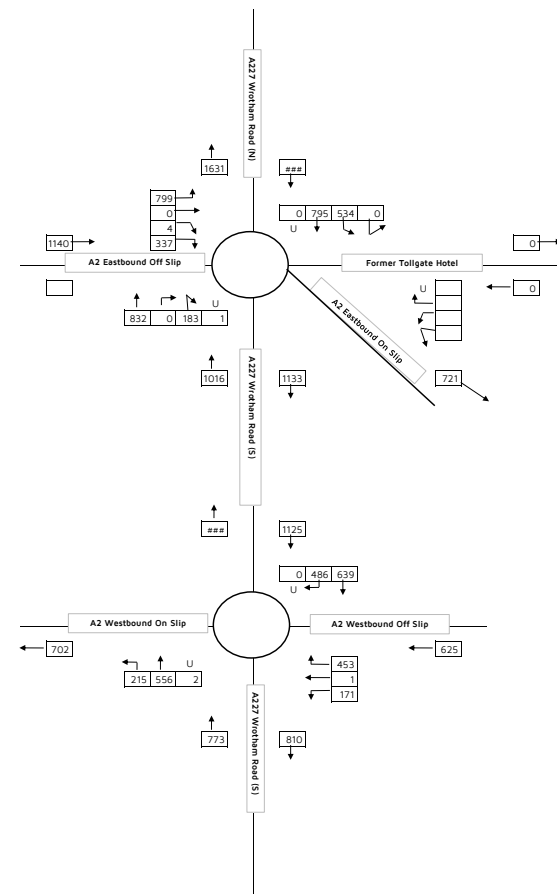


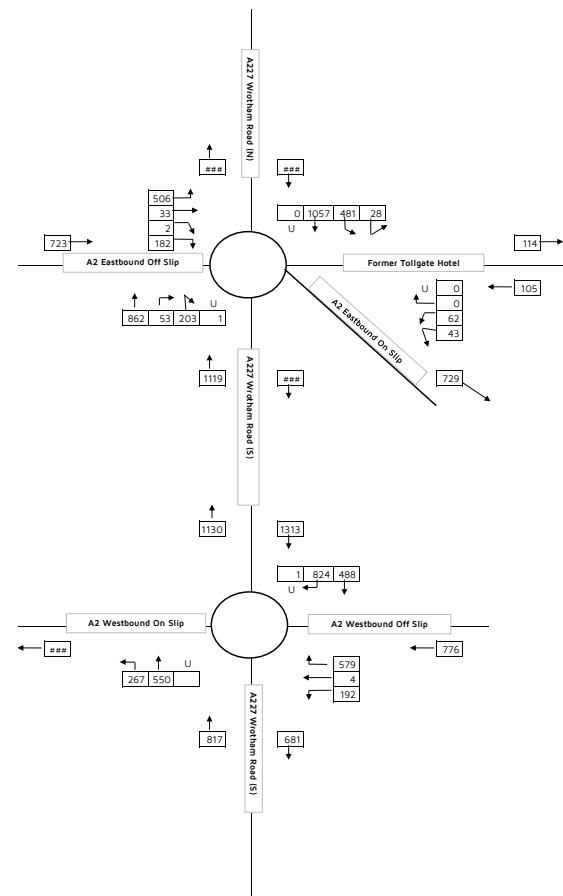
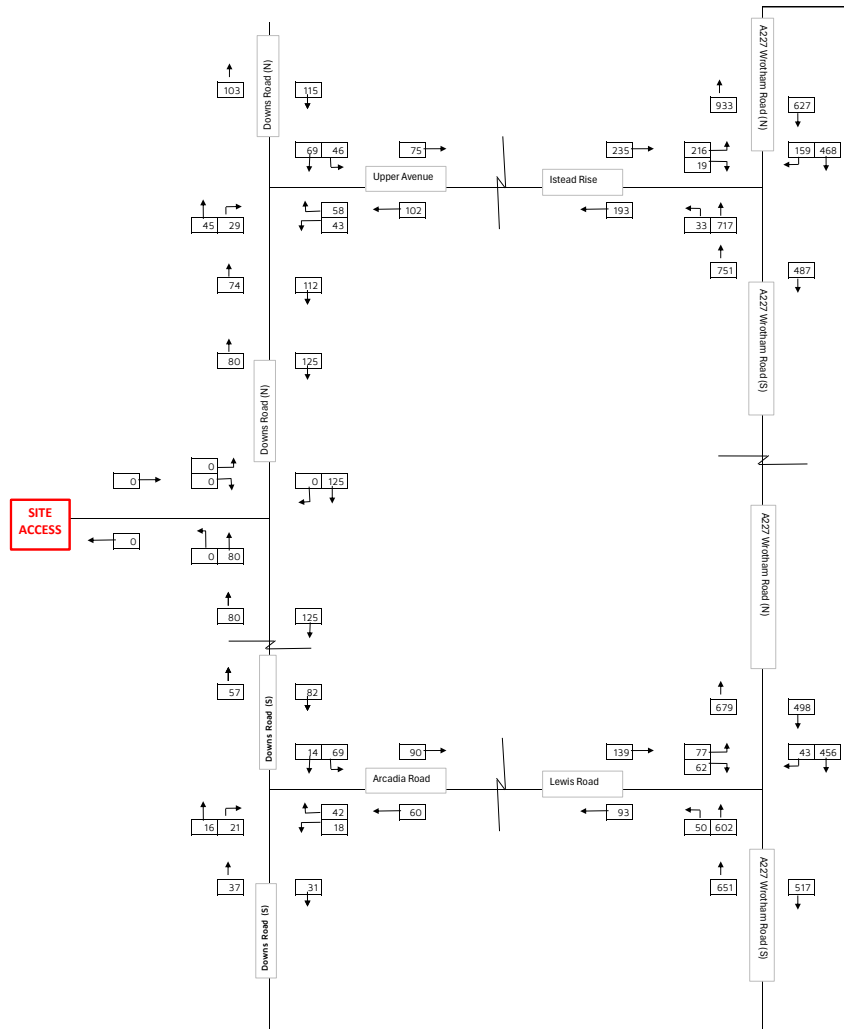
Rose Farm
2025 AM Base

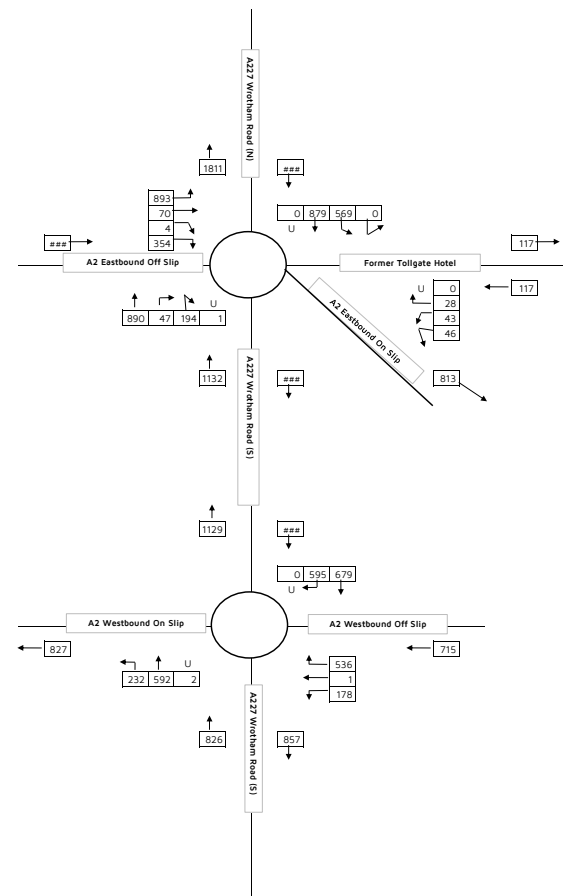
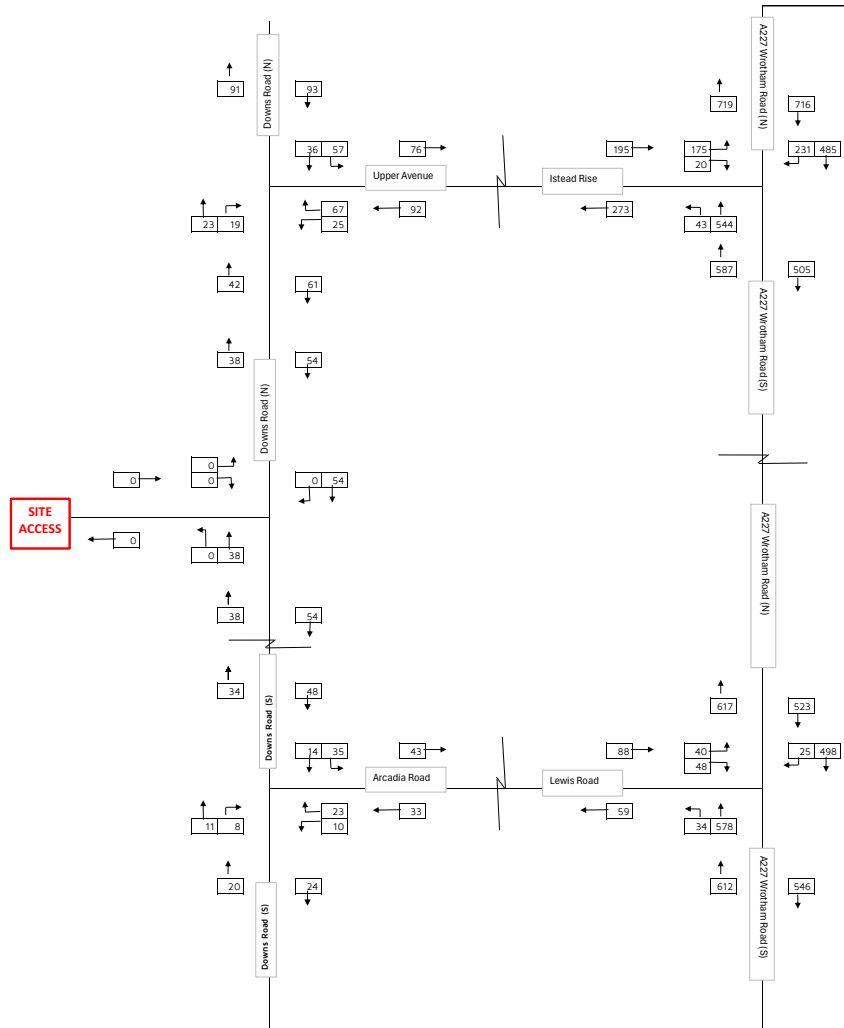
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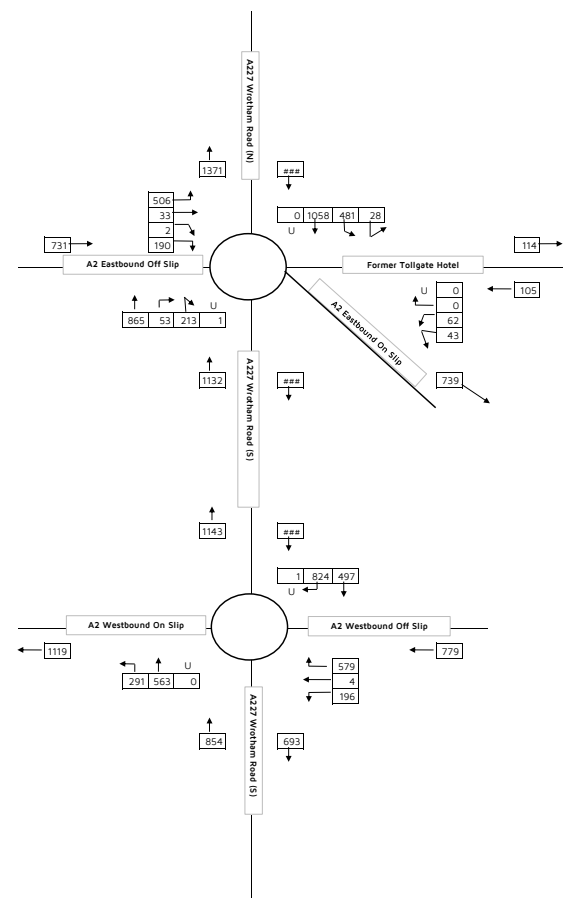
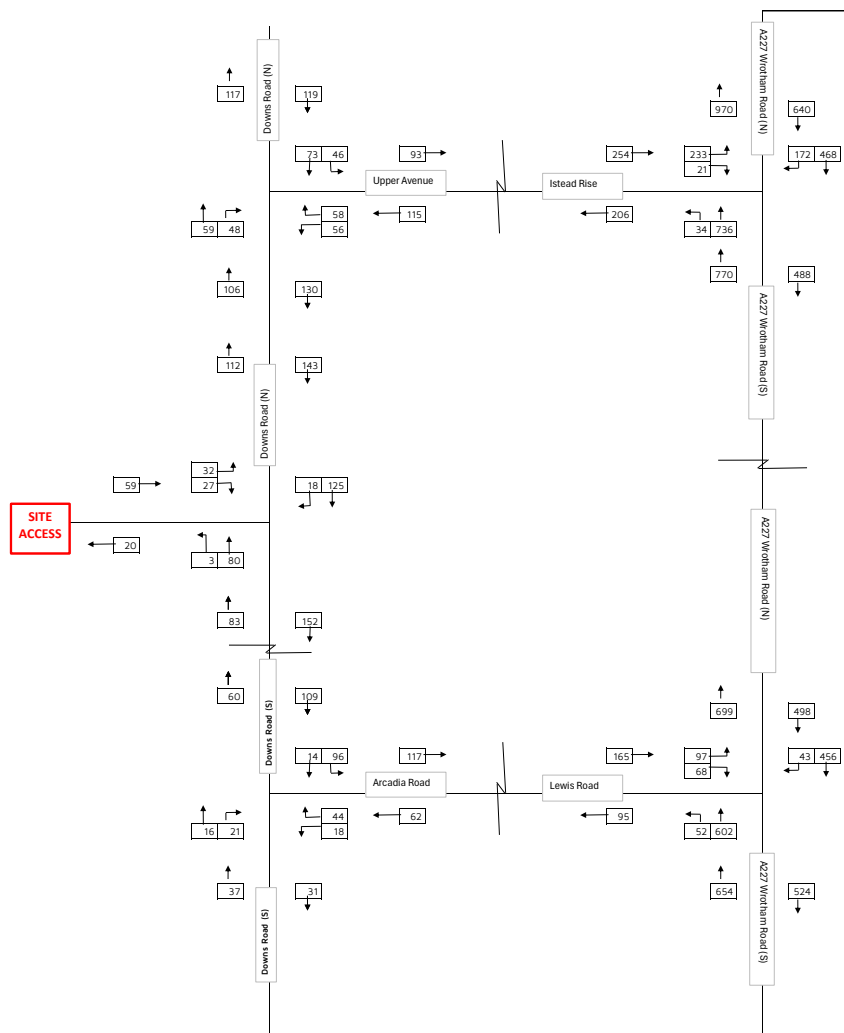
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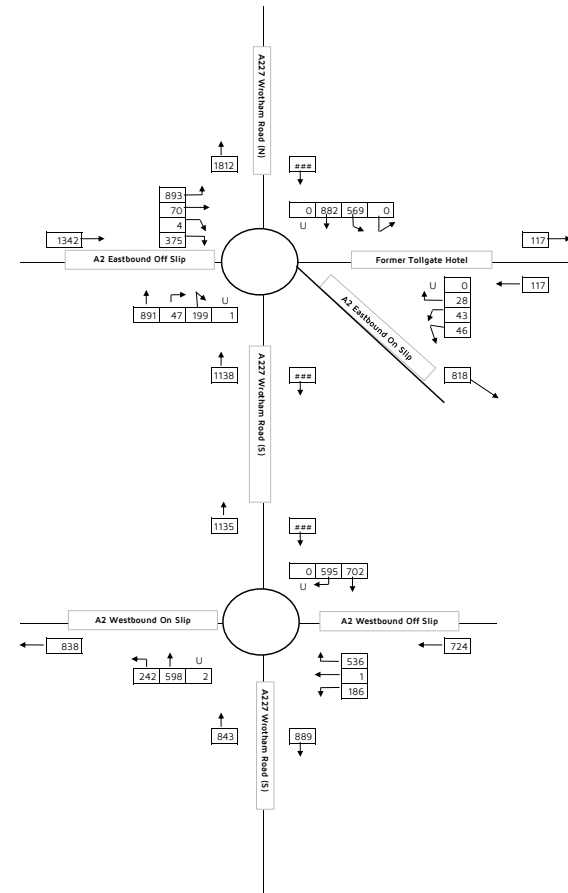
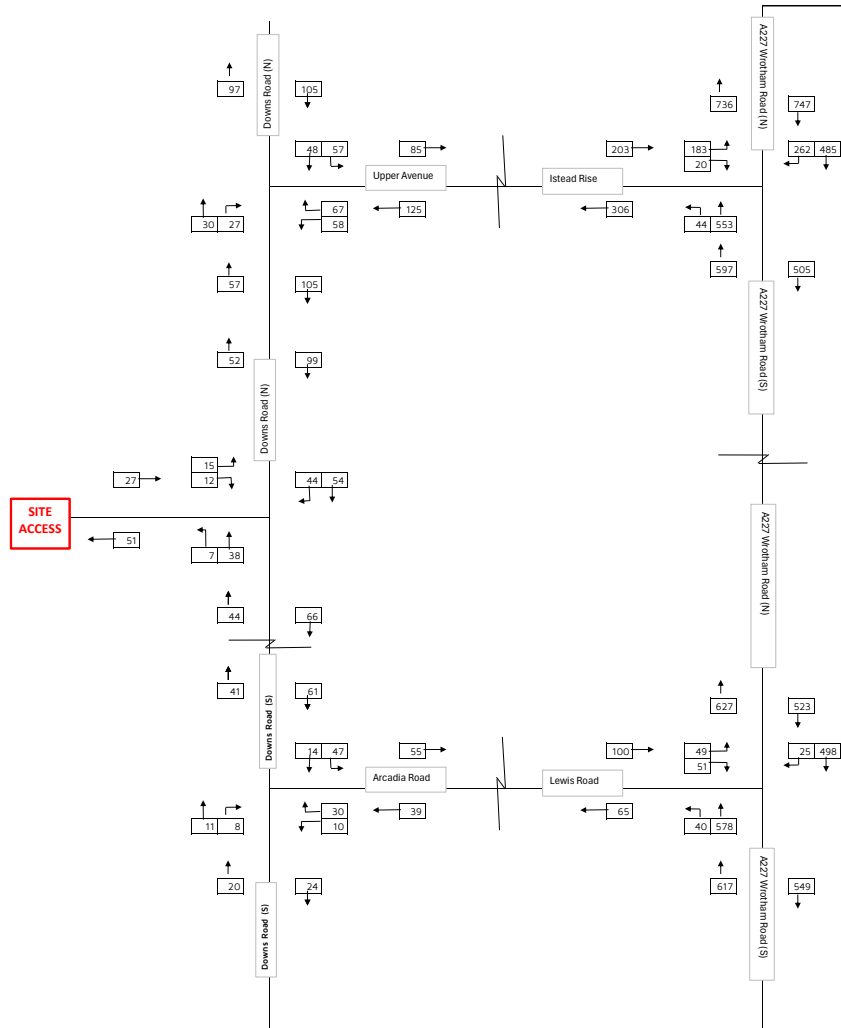
A2 / A227 Wrotham Road junction flows obtained from Former Tollgate Hotel planning application (20240856). Transport Assessment Addendum 24th October 2024 - Doc Number TAA01. Figure 46











APPENDIX C



Junctions 11		
ARCADY 11 - Roundabout Module		
Version: 11.0.0.2177		
© Copyright TRL Software Limited, 2024		
For sales and distribution information, program advice and maintenance, contact TRL Software:		
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com		
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: A2 - A227 - AM - Rose Farm.j11

Path: C:\Users\Tom.Valek\OneDriveCloudTemp\Z51DNXGN

Report generation date: 06/05/2026 08:57:35

»2023 | Base | AM
 »2025 | Base | AM
 »2030 | DN | AM
 »2030 | DM | AM

Summary of junction performance

	AM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	2023 - Base					
Junction 1 - Arm 1	D1	60.1	272.22	1.17	F	81.22
Junction 1 - Arm 2		6.1	27.89	0.86	D	
Junction 1 - Arm 4		1.2	3.45	0.52	A	
Junction 2 - Arm 2		0.9	2.79	0.44	A	7.92
Junction 2 - Arm 3		2.0	10.70	0.65	B	
Junction 2 - Arm 4		4.3	10.39	0.80	B	
Junction 2 - Arm 5		0.0	0.00	0.00	A	
	2025 - Base					
Junction 1 - Arm 1	D3	67.6	303.14	1.19	F	90.22
Junction 1 - Arm 2		6.5	29.41	0.87	D	
Junction 1 - Arm 4		1.2	3.48	0.52	A	
Junction 2 - Arm 2		0.9	2.81	0.44	A	8.21
Junction 2 - Arm 3		2.1	11.21	0.66	B	
Junction 2 - Arm 4		4.5	10.77	0.81	B	
Junction 2 - Arm 5		0.0	0.00	0.00	A	
	2030 - DM					
Junction 1 - Arm 1	D7	202.1	1066.44	1.65	F	316.49
Junction 1 - Arm 2		31.3	115.70	1.03	F	
Junction 1 - Arm 4		1.7	4.28	0.61	A	
Junction 2 - Arm 2		1.1	3.11	0.49	A	22.11
Junction 2 - Arm 3		6.0	28.29	0.86	D	
Junction 2 - Arm 4		14.4	32.10	0.95	D	
Junction 2 - Arm 5		1.1	35.06	0.51	E	
	2030 - DN					
Junction 1 - Arm 1	D5	194.2	1027.31	1.63	F	299.16
Junction 1 - Arm 2		20.2	82.43	0.99	F	
Junction 1 - Arm 4		1.7	4.24	0.61	A	
Junction 2 - Arm 2		1.0	3.07	0.49	A	20.37
Junction 2 - Arm 3		5.3	25.07	0.84	D	
Junction 2 - Arm 4		13.3	29.71	0.94	D	
Junction 2 - Arm 5		1.0	32.85	0.49	D	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	11/11/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DHA\Tom.Valek
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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	Base	AM	ONE HOUR	07:45	09:15	15	✓
D3	2025	Base	AM	ONE HOUR	07:45	09:15	15	✓
D5	2030	DN	AM	ONE HOUR	07:45	09:15	15	✓
D7	2030	DM	AM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

2023 | Base | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	81.22	F
2	untitled	Standard Roundabout		1, 2, 3, 4, 5	7.92	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	41.59	E

Arms

Arms

Junction	Arm	Name	Description	No give-way line
1	1	A2 Westbound Off Slip		
	2	A227 (S)		
	3	A2 Westbound On Slip		
	4	A227 (N)		
2	1	A2 Eastbound On Slip		
	2	A227 (S)		
	3	A2 Eastbound Off Slip		
	4	A227 (N)		
	5	Former Tollgate Hotel		

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	1	3.70	8.50	10.2	19.1	59.9	60.0	✓	
	2	4.90	9.20	22.2	24.1	59.9	49.0		
	3								✓
	4	7.60	8.10	6.9	20.8	59.9	36.0		
2	1								✓
	2	7.10	9.30	17.9	31.1	63.9	47.0		
	3	7.00	10.20	17.9	40.0	63.9	24.0	✓	
	4	4.60	9.30	22.1	48.8	63.9	50.0		
	5	3.10	5.50	5.4	12.7	63.9	59.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Junction	Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1	1	Direct	Queue	-275
	2	Direct		-440
	3			
	4	None		
2	1			
	2	None		
	3	Direct		-1000
	4	None		
	5	None		

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1	0.499	1245
	2	0.622	1717
	3		
	4	0.671	2380
2	1		
	2	0.662	2521
	3	0.741	1862
	4	0.600	2150
	5	0.400	1080

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	Base	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	669	100.000
	2		ONE HOUR	✓	764	100.000
	3					
	4		ONE HOUR	✓	1119	100.000
2	1					
	2		ONE HOUR	✓	1001	100.000
	3		ONE HOUR	✓	614	100.000
	4		ONE HOUR	✓	1390	100.000
	5		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	178	4	487
	2	0	0	251	513
	3	0	0	0	0
	4	0	456	662	1

Demand (PCU/hr)

Junction 2

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	194	1	0	806	0
	3	2	166	0	445	1
	4	441	949	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

	To				
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

	To					
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.17	272.22	60.1	F	614	921
	2	0.86	27.89	6.1	D	701	1052
	3						
	4	0.52	3.45	1.2	A	1027	1540
2	1						
	2	0.44	2.79	0.9	A	919	1378
	3	0.65	10.70	2.0	B	563	845
	4	0.80	10.39	4.3	B	1275	1913
	5	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	504	126	840	827	0.609	497	0	0.0	1.7	11.785	B
	2	575	144	863	1181	0.487	571	475	0.0	1.0	6.452	A
	3			746				688				
	4	842	211	0	2380	0.354	840	746	0.0	0.6	2.569	A
2	1			836				478				
	2	754	188	0	2521	0.299	752	836	0.0	0.5	2.237	A
	3	462	116	752	1305	0.354	460	0	0.0	0.6	4.672	A
	4	1046	262	273	1986	0.527	1042	939	0.0	1.2	4.171	A
	5	0	0	1314	555	0.000	0	0.75	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	601	150	1005	744	0.808	592	0	1.7	4.1	24.527	C
	2	687	172	1030	1077	0.638	683	567	1.0	1.9	9.978	A
	3			891				823				
	4	1006	251	0	2380	0.423	1005	891	0.6	0.8	2.879	A
2	1			1001				572				
	2	900	225	0	2521	0.357	899	1001	0.5	0.6	2.443	A
	3	552	138	899	1196	0.462	551	0	0.6	0.9	6.126	A
	4	1250	312	327	1954	0.639	1247	1123	1.2	1.9	5.575	A
	5	0	0	1573	451	0.000	0	0.90	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	737	184	1231	632	1.165	620	0	4.1	33.3	126.244	F
	2	841	210	1184	981	0.857	826	666	1.9	5.6	23.628	C
	3			1007				1003				
	4	1232	308	0	2380	0.518	1231	1007	0.8	1.2	3.441	A
2	1			1221				698				
	2	1102	276	0	2521	0.437	1101	1221	0.6	0.9	2.789	A
	3	676	169	1101	1046	0.646	672	0	0.9	1.9	10.468	B
	4	1530	383	399	1911	0.801	1521	1374	1.9	4.2	9.945	A
	5	0	0	1920	312	0.000	0	1	0.0	0.0	0.000	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	737	184	1232	631	1.167	629	0	33.3	60.1	272.224	F
	2	841	210	1192	976	0.862	839	669	5.6	6.1	27.888	D
	3			1023				1008				
	4	1232	308	0	2380	0.518	1232	1023	1.2	1.2	3.449	A
2	1			1228				701				
	2	1102	276	0	2521	0.437	1102	1228	0.9	0.9	2.791	A
	3	676	169	1102	1046	0.647	676	0	1.9	2.0	10.704	B
	4	1530	383	401	1910	0.801	1530	1377	4.2	4.3	10.394	B
	5	0	0	1930	308	0.000	0	1	0.0	0.0	0.000	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	601	150	1007	743	0.809	730	0	60.1	28.0	220.191	F
	2	687	172	1133	1013	0.678	702	605	6.1	2.4	13.287	B
	3			1003				831				
	4	1006	251	0	2380	0.423	1007	1003	1.2	0.8	2.887	A
2	1			1011				576				
	2	900	225	0	2521	0.357	901	1011	0.9	0.6	2.445	A
	3	552	138	901	1195	0.462	556	0	2.0	1.0	6.242	A
	4	1250	312	329	1953	0.640	1259	1128	4.3	2.0	5.780	A
	5	0	0	1587	446	0.000	0	0.91	0.0	0.0	0.000	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	504	126	843	825	0.610	608	0	28.0	1.8	28.235	D
	2	575	144	946	1129	0.510	580	506	2.4	1.2	7.283	A
	3			833				693				
	4	842	211	0	2380	0.354	843	833	0.8	0.6	2.578	A
2	1			843				481				
	2	754	188	0	2521	0.299	754	843	0.6	0.5	2.242	A
	3	462	116	754	1303	0.355	464	0	1.0	0.6	4.724	A
	4	1046	262	275	1986	0.527	1049	943	2.0	1.2	4.243	A
	5	0	0	1323	551	0.000	0	0.76	0.0	0.0	0.000	A

2025 | Base | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	90.22	F
2	untitled	Standard Roundabout		1, 2, 3, 4, 5	8.21	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	45.88	E

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025	Base	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	679	100.000
	2		ONE HOUR	✓	770	100.000
	3					
	4		ONE HOUR	✓	1127	100.000
2	1					
	2		ONE HOUR	✓	1008	100.000
	3		ONE HOUR	✓	624	100.000
	4		ONE HOUR	✓	1400	100.000
	5		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
From		1	2	3	4
	1	0	181	4	494
	2	0	0	253	517
	3	0	0	0	0
	4	0	459	667	1

Demand (PCU/hr)

Junction 2

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	195	1	0	812	0
	3	2	169	0	452	1
	4	444	956	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

	To				
From		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

	To					
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.19	303.14	67.6	F	623	935
	2	0.87	29.41	6.5	D	707	1060
	3						
	4	0.52	3.48	1.2	A	1034	1551
2	1						
	2	0.44	2.81	0.9	A	925	1387
	3	0.66	11.21	2.1	B	573	859
	4	0.81	10.77	4.5	B	1285	1927
	5	0.00	0.00	0.0	A	0	0

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	511	128	846	824	0.621	504	0	0.0	1.7	12.148	B
	2	580	145	871	1175	0.493	575	479	0.0	1.1	6.555	A
	3			754				693				
	4	848	212	0	2380	0.357	846	754	0.0	0.6	2.577	A
2	1			844				481				
	2	759	190	0	2521	0.301	757	844	0.0	0.5	2.244	A
	3	470	117	757	1301	0.361	467	0	0.0	0.6	4.736	A
	4	1054	263	276	1985	0.531	1049	948	0.0	1.2	4.211	A
	5	0	0	1324	550	0.000	0	0.75	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	610	153	1012	741	0.824	600	0	1.7	4.4	26.245	D
	2	692	173	1040	1071	0.647	689	572	1.1	2.0	10.269	B
	3			900				829				
	4	1013	253	0	2380	0.426	1012	900	0.6	0.8	2.894	A
2	1			1010				575				
	2	906	227	0	2521	0.360	906	1010	0.5	0.6	2.452	A
	3	561	140	906	1191	0.471	560	0	0.6	1.0	6.257	A
	4	1259	315	330	1952	0.645	1256	1135	1.2	2.0	5.663	A
	5	0	0	1585	446	0.000	0	0.90	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	748	187	1239	628	1.191	617	0	4.4	37.0	138.297	F
	2	848	212	1187	979	0.866	832	669	2.0	5.9	24.681	C
	3			1009				1010				
	4	1241	310	0	2380	0.521	1239	1009	0.8	1.2	3.467	A
2	1			1232				702				
	2	1110	277	0	2521	0.440	1109	1232	0.6	0.9	2.804	A
	3	687	172	1109	1041	0.660	683	0	1.0	2.1	10.932	B
	4	1541	385	404	1908	0.808	1532	1388	2.0	4.4	10.272	B
	5	0	0	1934	307	0.000	0	1	0.0	0.0	0.000	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	748	187	1241	627	1.193	625	0	37.0	67.6	303.144	F
	2	848	212	1194	975	0.870	845	672	5.9	6.5	29.413	D
	3			1024				1016				
	4	1241	310	0	2380	0.521	1241	1024	1.2	1.2	3.475	A
2	1			1239				706				
	2	1110	277	0	2521	0.440	1110	1239	0.9	0.9	2.806	A
	3	687	172	1110	1040	0.661	687	0	2.1	2.1	11.206	B
	4	1541	385	405	1907	0.808	1541	1392	4.4	4.5	10.773	B
	5	0	0	1945	302	0.000	0	1	0.0	0.0	0.000	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	610	153	1015	740	0.825	728	0	67.6	38.2	262.241	F
	2	692	173	1135	1011	0.684	708	607	6.5	2.5	13.706	B
	3			1006				838				
	4	1013	253	0	2380	0.426	1015	1006	1.2	0.8	2.903	A
2	1			1020				580				
	2	906	227	0	2521	0.360	907	1020	0.9	0.6	2.455	A
	3	561	140	907	1190	0.471	565	0	2.1	1.0	6.386	A
	4	1259	315	332	1951	0.645	1268	1140	4.5	2.0	5.883	A
	5	0	0	1600	440	0.000	0	0.91	0.0	0.0	0.000	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	511	128	849	822	0.622	656	0	38.2	1.9	47.567	E
	2	580	145	985	1105	0.525	585	521	2.5	1.2	7.685	A
	3			871				699				
	4	848	212	0	2380	0.357	849	871	0.8	0.6	2.590	A
2	1			850				484				
	2	759	190	0	2521	0.301	759	850	0.6	0.5	2.250	A
	3	470	117	759	1299	0.362	471	0	1.0	0.6	4.792	A
	4	1054	263	278	1984	0.531	1057	953	2.0	1.3	4.289	A
	5	0	0	1334	547	0.000	0	0.76	0.0	0.0	0.000	A

2030 | DN | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	299.16	F
2	untitled	Standard Roundabout		1, 2, 3, 4, 5	20.37	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	146.56	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030	DN	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	775	100.000
	2		ONE HOUR	✓	817	100.000
	3					
	4		ONE HOUR	✓	1313	100.000
2	1					
	2		ONE HOUR	✓	1119	100.000
	3		ONE HOUR	✓	723	100.000
	4		ONE HOUR	✓	1566	100.000
	5		ONE HOUR	✓	105	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
From		1	2	3	4
	1	0	192	4	579
	2	0	0	267	550
	3	0	0	0	0
	4	0	488	824	1

Demand (PCU/hr)

Junction 2

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	203	1	0	862	53
	3	2	182	0	506	33
	4	481	1057	0	0	28
	5	43	62	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

	To				
From		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

	To					
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.63	1027.31	194.2	F	711	1067
	2	0.99	82.43	20.2	F	750	1125
	3						
	4	0.61	4.24	1.7	A	1205	1807
2	1						
	2	0.49	3.07	1.0	A	1027	1540
	3	0.84	25.07	5.3	D	663	995
	4	0.94	29.71	13.3	D	1437	2155
	5	0.49	32.85	1.0	D	96	145

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	583	146	985	754	0.774	570	0	0.0	3.4	20.220	C
	2	615	154	1048	1066	0.577	609	507	0.0	1.5	8.570	A
	3			837				820				
	4	988	247	0	2380	0.415	985	837	0.0	0.8	2.834	A
2	1			974				546				
	2	842	211	0	2521	0.334	840	974	0.0	0.6	2.353	A
	3	544	136	840	1239	0.439	541	0	0.0	0.9	5.642	A
	4	1179	295	355	1937	0.609	1172	1026	0.0	1.7	5.133	A
	5	79	20	1442	503	0.157	78	85	0.0	0.2	9.297	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	697	174	1179	658	1.059	631	0	3.4	19.7	85.529	F
	2	734	184	1216	961	0.764	727	595	1.5	3.3	16.417	C
	3			962				981				
	4	1180	295	0	2380	0.496	1179	962	0.8	1.1	3.295	A
2	1			1166				653				
	2	1006	251	0	2521	0.399	1005	1166	0.6	0.7	2.612	A
	3	650	162	1005	1117	0.582	647	0	0.9	1.5	8.381	A
	4	1408	352	425	1895	0.743	1402	1227	1.7	3.1	7.945	A
	5	94	24	1725	390	0.242	94	102	0.2	0.3	13.336	B

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	853	213	1443	526	1.622	525	0	19.7	101.7	430.743	F
	2	900	225	1302	908	0.991	854	667	3.3	14.7	51.562	F
	3			969				1188				
	4	1446	361	0	2380	0.607	1443	969	1.1	1.7	4.217	A
2	1			1406				791				
	2	1232	308	0	2521	0.489	1231	1406	0.7	1.0	3.067	A
	3	796	199	1231	950	0.838	782	0	1.5	4.9	22.012	C
	4	1724	431	517	1840	0.937	1690	1496	3.1	11.5	22.667	C
	5	116	29	2084	247	0.468	113	124	0.3	0.9	29.173	D

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	853	213	1446	525	1.626	525	0	101.7	183.9	879.401	F
	2	900	225	1303	907	0.992	877	667	14.7	20.2	82.426	F
	3			984				1197				
	4	1446	361	0	2380	0.607	1446	984	1.7	1.7	4.238	A
2	1			1428				800				
	2	1232	308	0	2521	0.489	1232	1428	1.0	1.0	3.072	A
	3	796	199	1232	949	0.839	795	0	4.9	5.3	25.070	D
	4	1724	431	521	1837	0.938	1717	1505	11.5	13.3	29.714	D
	5	116	29	2113	235	0.492	115	125	0.9	1.0	32.852	D

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	697	174	1183	656	1.062	656	0	183.9	194.2	1027.308	F
	2	734	184	1236	948	0.774	799	602	20.2	4.2	34.200	D
	3			1028				1007				
	4	1180	295	0	2380	0.496	1183	1028	1.7	1.1	3.316	A
2	1			1203				669				
	2	1006	251	0	2521	0.399	1007	1203	1.0	0.7	2.620	A
	3	650	162	1007	1116	0.583	665	0	5.3	1.6	9.054	A
	4	1408	352	431	1892	0.744	1448	1241	13.3	3.3	9.682	A
	5	94	24	1775	370	0.255	97	104	1.0	0.4	14.607	B

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	583	146	990	752	0.776	748	0	194.2	153.1	836.619	F
	2	615	154	1184	981	0.627	624	553	4.2	1.9	11.372	B
	3			980				829				
	4	988	247	0	2380	0.415	990	980	1.1	0.8	2.850	A
2	1			986				551				
	2	842	211	0	2521	0.334	843	986	0.7	0.6	2.361	A
	3	544	136	843	1237	0.440	547	0	1.6	0.9	5.759	A
	4	1179	295	358	1935	0.609	1185	1032	3.3	1.7	5.323	A
	5	79	20	1457	497	0.159	80	86	0.4	0.2	9.496	A

2030 | DM | AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	316.49	F
2	untitled	Standard Roundabout		1, 2, 3, 4, 5	22.11	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	156.15	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2030	DM	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	779	100.000
	2		ONE HOUR	✓	854	100.000
	3					
	4		ONE HOUR	✓	1322	100.000
2	1					
	2		ONE HOUR	✓	1132	100.000
	3		ONE HOUR	✓	731	100.000
	4		ONE HOUR	✓	1567	100.000
	5		ONE HOUR	✓	105	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

	To				
		1	2	3	4
From	1	0	196	4	579
	2	0	0	291	563
	3	0	0	0	0
	4	0	497	824	1

Demand (PCU/hr)

Junction 2

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	213	1	0	865	53
	3	2	190	0	506	33
	4	481	1058	0	0	28
	5	43	62	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

	To				
From		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

	To					
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.65	1066.44	202.1	F	715	1072
	2	1.03	115.70	31.3	F	784	1175
	3						
	4	0.61	4.28	1.7	A	1213	1820
2	1						
	2	0.49	3.11	1.1	A	1039	1558
	3	0.86	28.29	6.0	D	671	1006
	4	0.95	32.10	14.4	D	1438	2157
	5	0.51	35.06	1.1	E	96	145

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	586	147	992	751	0.781	572	0	0.0	3.5	20.808	C
	2	643	161	1047	1066	0.603	636	517	0.0	1.6	9.090	A
	3			846				838				
	4	995	249	0	2380	0.418	992	846	0.0	0.8	2.848	A
2	1			981				553				
	2	852	213	0	2521	0.338	850	981	0.0	0.6	2.367	A
	3	550	138	850	1232	0.447	547	0	0.0	0.9	5.749	A
	4	1180	295	369	1929	0.612	1173	1028	0.0	1.7	5.192	A
	5	79	20	1456	498	0.159	78	85	0.0	0.2	9.422	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	700	175	1187	654	1.071	630	0	3.5	21.1	90.547	F
	2	768	192	1212	963	0.797	759	605	1.6	3.9	18.544	C
	3			969				1002				
	4	1188	297	0	2380	0.499	1187	969	0.8	1.1	3.317	A
2	1			1174				662				
	2	1018	254	0	2521	0.404	1017	1174	0.6	0.7	2.632	A
	3	657	164	1017	1109	0.593	654	0	0.9	1.6	8.666	A
	4	1409	352	441	1885	0.747	1403	1230	1.7	3.1	8.112	A
	5	94	24	1742	383	0.246	94	102	0.2	0.4	13.644	B

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	858	214	1453	521	1.646	520	0	21.1	105.4	452.334	F
	2	940	235	1296	911	1.032	875	677	3.9	20.3	64.535	F
	3			965				1206				
	4	1456	364	0	2380	0.612	1453	965	1.1	1.7	4.262	A
2	1			1413				801				
	2	1246	312	0	2521	0.494	1245	1413	0.7	1.1	3.102	A
	3	805	201	1245	940	0.857	789	0	1.6	5.5	24.155	C
	4	1725	431	537	1828	0.944	1689	1498	3.1	12.3	23.864	C
	5	116	29	2101	240	0.482	113	124	0.4	1.0	30.699	D

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	858	214	1456	520	1.650	520	0	105.4	189.9	912.631	F
	2	940	235	1297	911	1.033	896	678	20.3	31.3	115.697	F
	3			978				1215				
	4	1456	364	0	2380	0.612	1456	978	1.7	1.7	4.284	A
2	1			1437				811				
	2	1246	312	0	2521	0.494	1246	1437	1.1	1.1	3.107	A
	3	805	201	1246	939	0.857	803	0	5.5	6.0	28.288	D
	4	1725	431	541	1825	0.945	1717	1508	12.3	14.4	32.096	D
	5	116	29	2133	227	0.509	115	125	1.0	1.1	35.056	E

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	700	175	1191	652	1.074	652	0	189.9	202.1	1066.444	F
	2	768	192	1231	952	0.807	871	612	31.3	5.5	64.381	F
	3			1059				1042				
	4	1188	297	0	2380	0.499	1191	1059	1.7	1.1	3.339	A
2	1			1214				679				
	2	1018	254	0	2521	0.404	1019	1214	1.1	0.7	2.641	A
	3	657	164	1019	1107	0.594	674	0	6.0	1.6	9.502	A
	4	1409	352	448	1881	0.749	1453	1245	14.4	3.4	10.134	B
	5	94	24	1797	362	0.261	97	104	1.1	0.4	15.118	C

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	586	147	997	749	0.783	745	0	202.1	162.6	882.396	F
	2	643	161	1179	984	0.653	656	562	5.5	2.1	12.541	B
	3			987				849				
	4	995	249	0	2380	0.418	997	987	1.1	0.8	2.866	A
2	1			993				559				
	2	852	213	0	2521	0.338	853	993	0.7	0.6	2.375	A
	3	550	138	853	1230	0.447	553	0	1.6	0.9	5.878	A
	4	1180	295	371	1927	0.612	1186	1035	3.4	1.8	5.391	A
	5	79	20	1472	492	0.161	80	86	0.4	0.2	9.633	A

Junctions 11		
ARCADY 11 - Roundabout Module		
Version: 11.0.0.2177		
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Filename: A2 - A227 - PM - Rose Farm.j11
 Path: C:\Users\Tom.Valek\OneDriveCloudTemp\Z51DNXGN
 Report generation date: 06/05/2026 09:05:40

-
- »2023 | Base | PM
 - »2025 | Base | PM
 - »2030 | DN | PM
 - »2030 | DM | PM

Summary of junction performance

	PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	2023 - Base					
Junction 1 - Arm 1	D2	61.3	302.89	1.19	F	84.30
Junction 1 - Arm 2		5.9	26.37	0.85	D	
Junction 1 - Arm 4		1.2	3.45	0.52	A	
Junction 2 - Arm 2		0.9	2.81	0.44	A	10.16
Junction 2 - Arm 3		5.2	15.60	0.83	C	
Junction 2 - Arm 4		4.4	11.16	0.80	B	
Junction 2 - Arm 5		0.0	0.00	0.00	A	
	2025 - Base					
Junction 1 - Arm 1	D4	67.4	331.32	1.21	F	92.02
Junction 1 - Arm 2		6.1	27.40	0.86	D	
Junction 1 - Arm 4		1.2	3.47	0.52	A	
Junction 2 - Arm 2		0.9	2.82	0.44	A	10.81
Junction 2 - Arm 3		5.7	17.06	0.85	C	
Junction 2 - Arm 4		4.6	11.56	0.81	B	
Junction 2 - Arm 5		0.0	0.00	0.00	A	
	2030 - DM					
Junction 1 - Arm 1	D8	193.8	1099.64	1.68	F	300.01
Junction 1 - Arm 2		16.9	68.50	0.97	F	
Junction 1 - Arm 4		1.6	4.16	0.60	A	
Junction 2 - Arm 2		1.1	3.17	0.50	A	63.20
Junction 2 - Arm 3		69.7	151.80	1.09	F	
Junction 2 - Arm 4		12.2	29.27	0.93	D	
Junction 2 - Arm 5		1.7	51.77	0.64	F	
	2030 - DN					
Junction 1 - Arm 1	D6	176.1	1005.31	1.62	F	275.81
Junction 1 - Arm 2		15.2	63.48	0.96	F	
Junction 1 - Arm 4		1.6	4.06	0.59	A	
Junction 2 - Arm 2		1.1	3.16	0.50	A	54.39
Junction 2 - Arm 3		57.6	129.18	1.06	F	
Junction 2 - Arm 4		11.1	26.83	0.92	D	
Junction 2 - Arm 5		1.6	46.55	0.61	E	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	11/11/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DHA\Tom.Valek
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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023	Base	PM	ONE HOUR	16:45	18:15	15	✓
D4	2025	Base	PM	ONE HOUR	16:45	18:15	15	✓
D6	2030	DN	PM	ONE HOUR	16:45	18:15	15	✓
D8	2030	DM	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

2023 | Base | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	84.30	F
2	untitled	Standard Roundabout		1, 2, 3, 4, 5	10.16	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	41.31	E

Arms

Arms

Junction	Arm	Name	Description	No give-way line
1	1	A2 Westbound Off Slip		
	2	A227 (S)		
	3	A2 Westbound On Slip		
	4	A227 (N)		
2	1	A2 Eastbound On Slip		
	2	A227 (S)		
	3	A2 Eastbound Off Slip		
	4	A227 (N)		
	5	Former Tollgate Hotel		

Roundabout Geometry

Junction	Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	1	3.70	8.50	10.2	19.1	59.9	60.0	✓	
	2	4.90	9.20	22.2	24.1	59.9	49.0		
	3								✓
	4	7.60	8.10	6.9	20.8	59.9	36.0		
2	1								✓
	2	7.10	9.30	17.9	31.1	63.9	47.0		
	3	7.00	10.20	17.9	40.0	63.9	24.0	✓	
	4	4.60	9.30	22.1	48.8	63.9	50.0		
	5	3.10	5.50	5.4	12.7	63.9	59.0		

Slope / Intercept / Capacity

Arm Intercept Adjustments

Junction	Arm	Type	Reason	Direct intercept adjustment (PCU/hr)
1	1	Direct		-335
	2	Direct		-580
	3			
	4	None		
2	1			
	2	None		
	3	Direct		-550
	4	None		
	5	None		

Roundabout Slope and Intercept used in model

Junction	Arm	Final slope	Final intercept (PCU/hr)
1	1	0.499	1185
	2	0.622	1577
	3		
	4	0.671	2380
2	1		
	2	0.662	2521
	3	0.741	2312
	4	0.600	2150
	5	0.400	1080

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023	Base	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	617	100.000
	2		ONE HOUR	✓	768	100.000
	3					
	4		ONE HOUR	✓	1118	100.000
2	1					
	2		ONE HOUR	✓	1010	100.000
	3		ONE HOUR	✓	1124	100.000
	4		ONE HOUR	✓	1321	100.000
	5		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
		1	2	3	4
From	1	0	169	1	447
	2	0	2	214	552
	3	0	0	0	0
	4	0	635	483	0

Demand (PCU/hr)

Junction 2

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	182	1	0	827	0
	3	4	332	0	788	0
	4	531	790	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

	To				
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

	To					
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.19	302.89	61.3	F	566	849
	2	0.85	26.37	5.9	D	705	1057
	3						
	4	0.52	3.45	1.2	A	1026	1539
2	1						
	2	0.44	2.81	0.9	A	927	1390
	3	0.83	15.60	5.2	C	1031	1547
	4	0.80	11.16	4.4	B	1212	1818
	5	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	465	116	841	766	0.606	458	0	0.0	1.6	12.595	B
	2	578	145	695	1145	0.505	574	604	0.0	1.1	6.882	A
	3			746				523				
	4	842	210	1	2379	0.354	839	744	0.0	0.6	2.569	A
2	1			841				538				
	2	760	190	0	2521	0.302	758	841	0.0	0.5	2.245	A
	3	846	212	758	1750	0.484	842	0	0.0	1.0	4.343	A
	4	995	249	389	1917	0.519	990	1211	0.0	1.2	4.251	A
	5	0	0	1379	529	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	555	139	1006	684	0.811	545	0	1.6	4.1	26.749	D
	2	690	173	829	1061	0.650	687	721	1.1	2.0	10.474	B
	3			890				626				
	4	1005	251	2	2379	0.423	1004	888	0.6	0.8	2.880	A
2	1			1007				643				
	2	908	227	0	2521	0.360	907	1007	0.5	0.6	2.455	A
	3	1010	253	907	1640	0.616	1008	0	1.0	1.7	6.235	A
	4	1188	297	466	1871	0.635	1185	1449	1.2	1.9	5.747	A
	5	0	0	1650	420	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	679	170	1232	571	1.189	561	0	4.1	33.7	139.953	F
	2	846	211	938	994	0.851	832	854	2.0	5.4	22.782	C
	3			1006				764				
	4	1231	308	2	2378	0.518	1229	1004	0.8	1.2	3.442	A
2	1			1227				785				
	2	1112	278	0	2521	0.441	1111	1227	0.6	0.9	2.808	A
	3	1238	309	1111	1489	0.831	1225	0	1.7	4.9	14.341	B
	4	1454	364	567	1810	0.804	1445	1768	1.9	4.3	10.589	B
	5	0	0	2012	275	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	679	170	1233	571	1.190	569	0	33.7	61.3	302.892	F
	2	846	211	945	990	0.854	844	857	5.4	5.9	26.366	D
	3			1021				768				
	4	1231	308	2	2378	0.518	1231	1019	1.2	1.2	3.450	A
2	1			1236				789				
	2	1112	278	0	2521	0.441	1112	1236	0.9	0.9	2.810	A
	3	1238	309	1112	1488	0.832	1237	0	4.9	5.2	15.600	C
	4	1454	364	571	1807	0.805	1454	1778	4.3	4.4	11.156	B
	5	0	0	2025	270	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	555	139	1008	683	0.812	671	0	61.3	32.3	252.457	F
	2	690	173	922	1004	0.688	704	757	5.9	2.5	13.724	B
	3			994				632				
	4	1005	251	2	2379	0.423	1007	992	1.2	0.8	2.890	A
2	1			1019				649				
	2	908	227	0	2521	0.360	909	1019	0.9	0.6	2.458	A
	3	1010	253	909	1639	0.617	1024	0	5.2	1.8	6.578	A
	4	1188	297	471	1868	0.636	1197	1462	4.4	2.0	5.991	A
	5	0	0	1668	413	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	465	116	844	765	0.607	586	0	32.3	1.8	39.456	E
	2	578	145	790	1086	0.532	583	641	2.5	1.3	7.950	A
	3			845				527				
	4	842	210	2	2379	0.354	843	844	0.8	0.6	2.580	A
2	1			848				541				
	2	760	190	0	2521	0.302	761	848	0.6	0.5	2.252	A
	3	846	212	761	1748	0.484	849	0	1.8	1.0	4.419	A
	4	995	249	392	1915	0.519	998	1218	2.0	1.2	4.329	A
	5	0	0	1389	524	0.000	0	0	0.0	0.0	0.000	A

2025 | Base | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	92.02	F
2	untitled	Standard Roundabout		1, 2, 3, 4, 5	10.81	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	44.91	E

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2025	Base	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	625	100.000
	2		ONE HOUR	✓	773	100.000
	3					
	4		ONE HOUR	✓	1125	100.000
2	1					
	2		ONE HOUR	✓	1016	100.000
	3		ONE HOUR	✓	1140	100.000
	4		ONE HOUR	✓	1329	100.000
	5		ONE HOUR	✓	0	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

	To				
From		1	2	3	4
	1	0	171	1	453
	2	0	2	215	556
	3	0	0	0	0
	4	0	639	486	0

Demand (PCU/hr)

Junction 2

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	183	1	0	832	0
	3	4	337	0	799	0
	4	534	795	0	0	0
	5	0	0	0	0	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

	To				
From		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

	To					
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.21	331.32	67.4	F	574	860
	2	0.86	27.40	6.1	D	709	1064
	3						
	4	0.52	3.47	1.2	A	1032	1548
2	1						
	2	0.44	2.82	0.9	A	932	1398
	3	0.85	17.06	5.7	C	1046	1569
	4	0.81	11.56	4.6	B	1220	1829
	5	0.00	0.00	0.0	A	0	0

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	471	118	846	764	0.616	464	0	0.0	1.7	12.929	B
	2	582	145	702	1141	0.510	577	608	0.0	1.1	6.973	A
	3			753				526				
	4	847	212	1	2379	0.356	845	751	0.0	0.6	2.573	A
2	1			849				541				
	2	765	191	0	2521	0.303	763	849	0.0	0.5	2.251	A
	3	858	215	763	1747	0.491	854	0	0.0	1.1	4.416	A
	4	1001	250	394	1914	0.523	996	1223	0.0	1.2	4.290	A
	5	0	0	1389	524	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	562	140	1012	681	0.825	551	0	1.7	4.4	28.391	D
	2	695	174	837	1057	0.658	691	727	1.1	2.0	10.721	B
	3			898				630				
	4	1011	253	2	2379	0.425	1011	897	0.6	0.8	2.893	A
2	1			1016				647				
	2	913	228	0	2521	0.362	913	1016	0.5	0.6	2.463	A
	3	1025	256	913	1636	0.627	1022	0	1.1	1.8	6.418	A
	4	1195	299	471	1868	0.640	1192	1464	1.2	1.9	5.834	A
	5	0	0	1663	415	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	688	172	1239	568	1.212	558	0	4.4	36.8	151.287	F
	2	851	213	940	993	0.857	837	858	2.0	5.6	23.528	C
	3			1009				768				
	4	1239	310	2	2378	0.521	1237	1007	0.8	1.2	3.465	A
2	1			1237				790				
	2	1119	280	0	2521	0.444	1118	1237	0.6	0.9	2.822	A
	3	1255	314	1118	1484	0.846	1241	0	1.8	5.4	15.440	C
	4	1463	366	574	1806	0.810	1453	1785	1.9	4.4	10.925	B
	5	0	0	2027	270	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	688	172	1241	567	1.214	566	0	36.8	67.4	331.323	F
	2	851	213	946	989	0.861	849	860	5.6	6.1	27.395	D
	3			1023				772				
	4	1239	310	2	2378	0.521	1239	1021	1.2	1.2	3.473	A
2	1			1247				794				
	2	1119	280	0	2521	0.444	1119	1247	0.9	0.9	2.824	A
	3	1255	314	1119	1483	0.846	1254	0	5.4	5.7	17.057	C
	4	1463	366	578	1804	0.811	1463	1795	4.4	4.6	11.565	B
	5	0	0	2040	264	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	562	140	1015	680	0.827	669	0	67.4	40.7	290.563	F
	2	695	174	923	1003	0.693	709	760	6.1	2.6	14.056	B
	3			997				636				
	4	1011	253	2	2379	0.425	1013	995	1.2	0.8	2.904	A
2	1			1029				653				
	2	913	228	0	2521	0.362	914	1029	0.9	0.6	2.466	A
	3	1025	256	914	1635	0.627	1040	0	5.7	1.9	6.826	A
	4	1195	299	477	1864	0.641	1205	1478	4.6	2.0	6.098	A
	5	0	0	1682	408	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	471	118	849	762	0.617	626	0	40.7	1.9	62.750	F
	2	582	145	821	1067	0.546	587	654	2.6	1.3	8.336	A
	3			877				530				
	4	847	212	2	2379	0.356	848	876	0.8	0.6	2.587	A
2	1			856				544				
	2	765	191	0	2521	0.303	765	856	0.6	0.5	2.256	A
	3	858	215	765	1745	0.492	861	0	1.9	1.1	4.498	A
	4	1001	250	396	1912	0.523	1004	1231	2.0	1.2	4.372	A
	5	0	0	1400	520	0.000	0	0	0.0	0.0	0.000	A

2030 | DN | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	275.81	F
2	untitled	Standard Roundabout		1, 2, 3, 4, 5	54.39	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	145.61	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2030	DN	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	715	100.000
	2		ONE HOUR	✓	826	100.000
	3					
	4		ONE HOUR	✓	1274	100.000
2	1					
	2		ONE HOUR	✓	1132	100.000
	3		ONE HOUR	✓	1321	100.000
	4		ONE HOUR	✓	1448	100.000
	5		ONE HOUR	✓	117	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

	To				
From		1	2	3	4
	1	0	178	1	536
	2	0	2	232	592
	3	0	0	0	0
	4	0	679	595	0

Demand (PCU/hr)

Junction 2

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	194	1	0	890	47
	3	4	354	0	893	70
	4	569	879	0	0	0
	5	43	46	0	28	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

	To				
From		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

	To					
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.62	1005.31	176.1	F	656	984
	2	0.96	63.48	15.2	F	758	1137
	3						
	4	0.59	4.06	1.6	A	1169	1754
2	1						
	2	0.50	3.16	1.1	A	1039	1558
	3	1.06	129.18	57.6	F	1212	1818
	4	0.92	26.83	11.1	D	1329	1993
	5	0.61	46.55	1.6	E	107	161

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	538	135	958	708	0.760	526	0	0.0	3.2	20.498	C
	2	622	155	841	1054	0.590	616	642	0.0	1.5	8.913	A
	3			837				620				
	4	959	240	1	2379	0.403	956	835	0.0	0.7	2.777	A
2	1			979				607				
	2	852	213	21	2507	0.340	850	958	0.0	0.6	2.387	A
	3	995	249	871	1667	0.597	988	0	0.0	1.6	5.781	A
	4	1090	273	502	1849	0.590	1084	1357	0.0	1.6	5.135	A
	5	88	22	1498	481	0.183	87	88	0.0	0.2	10.030	B

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	643	161	1146	614	1.047	586	0	3.2	17.4	83.260	F
	2	743	186	974	971	0.764	735	757	1.5	3.3	16.309	C
	3			968				742				
	4	1145	286	2	2379	0.481	1144	966	0.7	1.0	3.205	A
2	1			1170				726				
	2	1018	254	25	2504	0.406	1017	1145	0.6	0.7	2.661	A
	3	1188	297	1042	1540	0.771	1180	0	1.6	3.5	10.766	B
	4	1302	325	600	1790	0.727	1297	1622	1.6	2.8	7.938	A
	5	105	26	1792	364	0.289	104	105	0.2	0.4	15.228	C

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	787	197	1403	486	1.619	485	0	17.4	92.8	424.500	F
	2	909	227	1019	944	0.964	875	869	3.3	12.0	43.698	E
	3			993				900				
	4	1403	351	2	2378	0.590	1401	991	1.0	1.6	4.040	A
2	1			1389				879				
	2	1246	312	30	2501	0.498	1245	1359	0.7	1.1	3.151	A
	3	1454	364	1275	1368	1.064	1334	0	3.5	33.7	61.852	F
	4	1594	399	698	1731	0.921	1566	1911	2.8	9.8	21.199	C
	5	129	32	2142	223	0.577	125	122	0.4	1.4	38.970	E

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	787	197	1405	485	1.623	485	0	92.8	168.4	867.531	F
	2	909	227	1019	943	0.964	896	870	12.0	15.2	63.476	F
	3			1008				908				
	4	1403	351	2	2378	0.590	1403	1006	1.6	1.6	4.058	A
2	1			1411				889				
	2	1246	312	31	2500	0.499	1246	1380	1.1	1.1	3.157	A
	3	1454	364	1277	1366	1.065	1359	0	33.7	57.6	129.184	F
	4	1594	399	707	1726	0.924	1589	1929	9.8	11.1	26.833	D
	5	129	32	2172	212	0.609	128	124	1.4	1.6	46.554	E

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	643	161	1149	612	1.049	612	0	168.4	176.1	1005.310	F
	2	743	186	996	958	0.775	787	766	15.2	4.1	27.571	D
	3			1025				758				
	4	1145	286	2	2379	0.482	1147	1023	1.6	1.0	3.224	A
2	1			1255				743				
	2	1018	254	26	2503	0.407	1019	1229	1.1	0.8	2.672	A
	3	1188	297	1045	1538	0.772	1401	0	57.6	4.2	55.820	F
	4	1302	325	672	1747	0.745	1333	1775	11.1	3.3	10.235	B
	5	105	26	1888	325	0.324	109	117	1.6	0.5	18.686	C

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	538	135	962	706	0.762	702	0	176.1	135.2	799.691	F
	2	622	155	975	971	0.641	630	688	4.1	2.0	11.910	B
	3			979				627				
	4	959	240	2	2379	0.403	960	978	1.0	0.7	2.793	A
2	1			992				613				
	2	852	213	21	2506	0.340	853	971	0.8	0.6	2.397	A
	3	995	249	874	1664	0.598	1005	0	4.2	1.7	6.093	A
	4	1090	273	508	1845	0.591	1097	1371	3.3	1.6	5.340	A
	5	88	22	1516	474	0.186	89	89	0.5	0.3	10.328	B

2030 | DM | PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	300.01	F
2	untitled	Standard Roundabout		1, 2, 3, 4, 5	63.20	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	161.25	F

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2030	DM	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1	1		ONE HOUR	✓	723	100.000
	2		ONE HOUR	✓	841	100.000
	3					
	4		ONE HOUR	✓	1296	100.000
2	1					
	2		ONE HOUR	✓	1138	100.000
	3		ONE HOUR	✓	1342	100.000
	4		ONE HOUR	✓	1451	100.000
	5		ONE HOUR	✓	117	100.000

Origin-Destination Data

Demand (PCU/hr)

Junction 1

		To			
From		1	2	3	4
	1	0	186	1	536
	2	0	2	241	598
	3	0	0	0	0
	4	0	701	595	0

Demand (PCU/hr)

Junction 2

	To					
		1	2	3	4	5
From	1	0	0	0	0	0
	2	199	1	0	891	47
	3	4	375	0	893	70
	4	569	882	0	0	0
	5	46	43	0	28	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Heavy Vehicle %

Junction 1

	To				
From		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Heavy Vehicle %

Junction 2

	To					
		1	2	3	4	5
From	1	10	10	10	10	10
	2	10	10	10	10	10
	3	10	10	10	10	10
	4	10	10	10	10	10
	5	10	10	10	10	10

Results

Results Summary for whole modelled period

Junction	Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	1	1.68	1099.64	193.8	F	663	995
	2	0.97	68.50	16.9	F	772	1158
	3						
	4	0.60	4.16	1.6	A	1189	1784
2	1						
	2	0.50	3.17	1.1	A	1044	1566
	3	1.09	151.80	69.7	F	1231	1847
	4	0.93	29.27	12.2	D	1331	1997
	5	0.64	51.77	1.7	F	107	161

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	544	136	974	700	0.778	531	0	0.0	3.4	21.904	C
	2	633	158	841	1055	0.600	627	664	0.0	1.6	9.125	A
	3			840				627				
	4	976	244	1	2379	0.410	973	839	0.0	0.8	2.810	A
2	1			994				613				
	2	857	214	21	2507	0.342	854	973	0.0	0.6	2.393	A
	3	1010	253	875	1663	0.607	1004	0	0.0	1.7	5.943	A
	4	1092	273	521	1837	0.595	1086	1358	0.0	1.6	5.227	A
	5	88	22	1520	472	0.186	87	88	0.0	0.2	10.250	B

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	650	162	1166	604	1.076	582	0	3.4	20.5	95.288	F
	2	756	189	967	976	0.774	749	781	1.6	3.5	16.847	C
	3			965				750				
	4	1165	291	2	2379	0.490	1164	964	0.8	1.0	3.257	A
2	1			1189				733				
	2	1023	256	25	2504	0.409	1022	1164	0.6	0.8	2.671	A
	3	1206	302	1047	1536	0.785	1198	0	1.7	3.8	11.427	B
	4	1304	326	623	1776	0.734	1299	1622	1.6	2.9	8.199	A
	5	105	26	1817	353	0.298	104	105	0.2	0.5	15.842	C

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	796	199	1427	474	1.679	474	0	20.5	101.1	477.585	F
	2	926	231	1006	952	0.973	888	895	3.5	13.0	45.933	E
	3			985				909				
	4	1427	357	2	2378	0.600	1425	983	1.0	1.6	4.142	A
2	1			1403				886				
	2	1253	313	30	2501	0.501	1252	1373	0.8	1.1	3.167	A
	3	1478	369	1281	1363	1.084	1335	0	3.8	39.4	69.663	F
	4	1598	399	718	1719	0.929	1567	1898	2.9	10.6	22.583	C
	5	129	32	2164	215	0.600	125	121	0.5	1.5	42.311	E

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	796	199	1429	473	1.683	473	0	101.1	181.8	948.238	F
	2	926	231	1006	951	0.973	910	896	13.0	16.9	68.502	F
	3			1000				917				
	4	1427	357	2	2378	0.600	1427	998	1.6	1.6	4.161	A
2	1			1425				897				
	2	1253	313	31	2500	0.501	1253	1394	1.1	1.1	3.174	A
	3	1478	369	1284	1361	1.086	1356	0	39.4	69.7	151.797	F
	4	1598	399	726	1715	0.932	1591	1914	10.6	12.2	29.265	D
	5	129	32	2194	203	0.636	128	122	1.5	1.7	51.769	F

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	650	162	1169	603	1.079	602	0	181.8	193.8	1099.637	F
	2	756	189	983	966	0.783	806	788	16.9	4.4	30.262	D
	3			1022				768				
	4	1165	291	2	2379	0.490	1167	1020	1.6	1.1	3.275	A
2	1			1291				752				
	2	1023	256	26	2503	0.409	1024	1265	1.1	0.8	2.679	A
	3	1206	302	1051	1534	0.787	1465	0	69.7	4.9	83.957	F
	4	1304	326	713	1722	0.757	1339	1803	12.2	3.6	11.165	B
	5	105	26	1933	307	0.342	110	119	1.7	0.6	20.482	C

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	1	544	136	978	698	0.780	694	0	193.8	156.4	909.334	F
	2	633	158	964	978	0.647	642	708	4.4	2.1	12.102	B
	3			973				634				
	4	976	244	2	2379	0.410	977	971	1.1	0.8	2.828	A
2	1			1010				620				
	2	857	214	21	2506	0.342	858	988	0.8	0.6	2.402	A
	3	1010	253	879	1661	0.608	1023	0	4.9	1.7	6.332	A
	4	1092	273	528	1833	0.596	1100	1374	3.6	1.6	5.457	A
	5	88	22	1540	464	0.190	89	89	0.6	0.3	10.599	B

APPENDIX D



[REDACTED]

From: [REDACTED]
Sent: 06 May 2026 09:14
To: [REDACTED]
Subject: RE: #26699 NH/26/14373 Application Further Information re: 20251233 Land At Rose Farm, Downs Road, Istead Rose

From: [REDACTED]
Sent: 20 April 2026 14:39
To: [REDACTED]
Subject: RE: #26699 NH/26/14373 Application Further Information re: 20251233 Land At Rose Farm, Downs Road, Istead Rose

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Hi [REDACTED]

JSSV has reviewed the junction models provided on 1 April 2025. Please see their response below in [blue](#) to your mail on 8th.

Should you or any others have any queries regarding our response, please contact us via planningse@nationalhighways.co.uk.

Kind Regards

[REDACTED]
[REDACTED]
National Highways

[REDACTED]
[REDACTED]

Web: www.nationalhighways.co.uk

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From: [REDACTED]
Sent: 15 April 2026 11:09
To: [REDACTED]
Subject: RE: #26699 NH/26/14373 Application Further Information re: 20251233 Land At Rose Farm, Downs Road, Istead Rose

Great thanks for the update [REDACTED]

[REDACTED]

[REDACTED]

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From: [REDACTED]

Sent: 15 April 2026 11:07

To: [REDACTED]

Subject: RE: #26699 NH/26/14373 Application Further Information re: 20251233 Land At Rose Farm, Downs Road, Istead Rose

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Hi [REDACTED]

This is being looked at by JSJV. We will let you know when we have a response within our stipulated time frame.

Thanks

[REDACTED]

[REDACTED]

National Highways

[REDACTED]

[REDACTED]

Web: www.nationalhighways.co.uk

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<https://nationalhighways.co.uk/our-roads/planning-and-the-strategic-road-network-in-england/>

From: [REDACTED]

Sent: 15 April 2026 09:39

To: [REDACTED]

Subject: RE: #26699 NH/26/14373 Application Further Information re: 20251233 Land At Rose Farm, Downs Road, Istead Rose

Hi [REDACTED],

Apologies to chase. We were just wondering if you could let us know when you expect to respond to our points below?

Thanks,

[REDACTED]

[REDACTED]

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From: [REDACTED]

Subject: RE: #26699 NH/26/14373 Application Further Information re: 20251233 Land At Rose Farm, Downs Road, Istead Rose

Hi [REDACTED]

It does address the discrepancies in traffic flows but not the interim mitigation assessment.

We have reviewed the Junctions models submitted on 1 April 2026 and note the following:

- A2 eastbound off-slip 2030 DN AM/PM traffic flow inputs are seen to have been revised, we note this is to addresses para. 16 of ANO3, **we require to be provided with the associated updated traffic flow diagrams in order to verify this information**
- A2 westbound off-slip 2030 DN PM traffic flow inputs are seen to have been corrected to align with Figure 13 contained within TA Appendix P, we note this is to addresses para. 25 of ANO3

The updated results which are presented are as follows:

AM							PM						
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)		Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	2023 - Base							2023 - Base					
Junction 1 - Arm 1	D1	60.1	272.22	1.17	F	81.22	Junction 1 - Arm 1	D2	60.8	300.18	1.19	F	83.59
Junction 1 - Arm 2		6.1	27.89	0.86	D		Junction 1 - Arm 2		5.8	26.09	0.85	D	
Junction 1 - Arm 4		1.2	3.45	0.52	A		Junction 1 - Arm 4		1.2	3.45	0.52	A	
Junction 2 - Arm 2		0.9	2.81	0.44	A	8.21	Junction 2 - Arm 2		0.9	2.82	0.44	A	10.81
Junction 2 - Arm 3		2.1	11.21	0.66	B		Junction 2 - Arm 3		5.7	17.06	0.85	C	
Junction 2 - Arm 4		4.5	10.77	0.81	B		Junction 2 - Arm 4		4.6	11.56	0.81	B	
Junction 2 - Arm 5		0.0	0.00	0.00	A		Junction 2 - Arm 5		0.0	0.00	0.00	A	
2025 - Base							2025 - Base						
Junction 1 - Arm 1	D3	67.6	303.14	1.19	F	90.22	Junction 1 - Arm 1	D4	67.4	331.32	1.21	F	92.02
Junction 1 - Arm 2		6.5	29.41	0.87	D		Junction 1 - Arm 2		6.1	27.40	0.86	D	
Junction 1 - Arm 4		1.2	3.48	0.52	A		Junction 1 - Arm 4		1.2	3.47	0.52	A	
Junction 2 - Arm 2		0.9	2.81	0.44	A	8.21	Junction 2 - Arm 2		0.9	2.82	0.44	A	10.81
Junction 2 - Arm 3		2.1	11.21	0.66	B		Junction 2 - Arm 3		5.7	17.06	0.85	C	
Junction 2 - Arm 4		4.5	10.77	0.81	B		Junction 2 - Arm 4		4.6	11.56	0.81	B	
Junction 2 - Arm 5		0.0	0.00	0.00	A		Junction 2 - Arm 5		0.0	0.00	0.00	A	
2030 - DN							2030 - DN						
Junction 1 - Arm 1	D5	194.2	1027.31	1.63	F	299.16	Junction 1 - Arm 1	D6 *	176.1	1005.31	1.62	F	275.81
Junction 1 - Arm 2		20.2	82.43	0.99	F		Junction 1 - Arm 2		15.2	63.48	0.96	F	
Junction 1 - Arm 4		1.7	4.24	0.61	A		Junction 1 - Arm 4		1.6	4.06	0.59	A	
Junction 2 - Arm 2		1.0	3.07	0.49	A	20.37	Junction 2 - Arm 2		1.1	3.16	0.50	A	54.39
Junction 2 - Arm 3		5.3	25.07	0.84	D		Junction 2 - Arm 3		57.6	129.18	1.06	F	
Junction 2 - Arm 4		13.3	29.71	0.94	D		Junction 2 - Arm 4		11.1	26.83	0.92	D	
Junction 2 - Arm 5		1.0	32.85	0.49	D		Junction 2 - Arm 5		1.6	46.55	0.61	E	
2030 - DM							2030 - DM						
Junction 1 - Arm 1	D7 *	202.1	1066.44	1.65	F	316.49	Junction 1 - Arm 1	D8	193.8	1099.64	1.68	F	300.01
Junction 1 - Arm 2		31.3	115.70	1.03	F		Junction 1 - Arm 2		16.9	68.50	0.97	F	
Junction 1 - Arm 4		1.7	4.28	0.61	A		Junction 1 - Arm 4		1.6	4.16	0.60	A	
Junction 2 - Arm 2		1.1	3.11	0.49	A	22.11	Junction 2 - Arm 2		1.1	3.17	0.50	A	63.20
Junction 2 - Arm 3		6.0	28.29	0.86	D		Junction 2 - Arm 3		69.7	151.80	1.09	F	
Junction 2 - Arm 4		14.4	32.10	0.95	D		Junction 2 - Arm 4		12.2	29.27	0.93	D	
Junction 2 - Arm 5		1.1	35.06	0.51	E		Junction 2 - Arm 5		1.7	51.77	0.64	F	

The following is noted with regard to updated results:

- A227 Wrotham Road / A2 Eastbound off-slip Roundabout: It is shown that the forecast queueing on A2 eastbound off-slip PM increases from 58 PCU to 70 PCU as a result of

the development; however this does not extend beyond the physical nose of the off-slip (the stopline to physical nose is 450m and there are two lanes), there is acceptable forward visibility to the rear of the queue and the impact is therefore concluded to acceptable

- A227 Wrotham Road / A2 Westbound off-slip Roundabout: It is shown that forecast queueing on the A2 westbound off-slip AM increases from 194 PCU to 202 PCU as a result of the development. **Our conclusion remains as stated within para. 27 of AN03, which is that there is significant adverse safety impact as a result of the proposed development and that mitigation is required to be considered.**

As is evident from our modelling, our development proposals can be comfortably accommodated with the proposed improvement scheme conditioned to the nearby Coldharbour application. It is to my understanding from a review of your comments that the main point surrounds whether the mitigation will be in place when the development is constructed and occupied given the existing queuing on the westbound off slip. You have therefore requested we assess the interim mitigation scheme to address this concern.

Yes, this is correct, the implementation date of the Coldharbour mitigation scheme is currently not confirmed and therefore we suggest that the 'interim mitigation scheme' associated with the Former Tollgate Hotel is considered. Rather than have a condition applied to this current planning application requiring the 'final mitigation scheme', if the interim scheme is sufficient to address impact it will be beneficial to only have this scheme conditioned. This will require further analysis to confirm.

In terms of a build out rate for the development I can confirm that this is currently scheduled to be a 4 year build out, starting on site in summer 2027 (subject to decision), first completion being in the summer of 2028 being off-site by 2032. We would appreciate any detail you are able to provide about the progress of this scheme. We also wanted to raise that although we appreciate queuing on the A2 westbound off slip is of concern, the development proposals are predicted to result in an limited increase in queuing vehicles, with increases to total delay negligible.

Regarding the status of the mitigation associated with the Coldharbour Rd development (planning application GR20141214), we are unsure of the latest status. Irrespective of this, we request the approach detailed above.

Regards,

[Redacted signature]

[Redacted contact information]

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From: [REDACTED]

Sent: 01 April 2026 16:48

To: [REDACTED]

Subject: RE: #26699 NH/26/14373 Application Further Information re: 20251233 Land At Rose Farm, Downs Road, Istead Rose

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Hi [REDACTED]

Does this address the discrepancies in Traffic flow and the additional interim mitigation assessment as noted in the AN03?

If not, please address all comments as it would be more efficient if all issues are dealt together.

Kind regards

[REDACTED]

[REDACTED]

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From: [REDACTED]

Subject: RE: #26699 NH/26/14373 Application Further Information re: 20251233 Land At Rose Farm, Downs Road, Istead Rose

Please see attached files.

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From: [REDACTED]

Subject: RE: #26699 NH/26/14373 Application Further Information re: 20251233 Land At Rose Farm, Downs Road, Istead Rose

Good afternoon [REDACTED],

Apologies for the minor errors in the modelling. Please see attached updated raw files, are you able to update the attached comments on that basis?

Regards,

[REDACTED]

[REDACTED]

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From:

[REDACTED]

Subject: #26699 NH/26/14373 Application Further Information re: 20251233 Land At Rose Farm, Downs Road, Istead Rose

[External email - This message originated from outside DHA – prior to opening any attachments or opening links, please ensure their authenticity with the sender]

Dear [REDACTED]

Please see attached Advice Note 03 (AN03) which contains the review prepared by JSJV of the Transport Technical Note prepared by DHA dated March 2026.

There are additional work that need to be undertaken.

In particular, impact on the A2 has been identified and additional junction assessment is required considering the mitigation associated with approved planning application 20240856.

Should you or any others have any queries regarding our response, please contact us via planningse@nationalhighways.co.uk.

Kind Regards

[Redacted signature block]

[Redacted signature block]

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From: [Redacted]

Sent: 17 March 2026 12:03

To: [Redacted]

Subject: RE: Land At Rose Farm, Downs Road, Istead Rose - 25/503683/OUT

Dear both,

Following your formal representation to this application and the below correspondence, we have produced the attached Technical Note response addressing the comments for your review.

I have sent on for ease, the applicant will submit so you can be formally reconsulted.

Happy to discuss any questions or comments on the Note.

Regards,

[Redacted signature block]

[Redacted signature block]

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APPENDIX E



Junctions 11						
ARCADY 11 - Roundabout Module						
Version: 11.0.0.2177						
© Copyright TRL Software Limited, 2024						
For sales and distribution information, program advice and maintenance, contact TRL Software:						
+44 (0)1344 379777 software@trl.co.uk trlsoftware.com						
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: A2 - A227 - AM - Rose Farm.j11
 Path: C:\Users\Tom.Valek\OneDriveCloudTemp\Z51DNXGN
 Report generation date: 06/05/2026 10:39:47

»2023 | Base | AM
 »2025 | Base | AM
 »2030 | DN | AM
 »2030 | DM | AM

Summary of junction performance

	AM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	[Lane Simulation] - 2023 - Base					
Arm 1	D1	3.3	16.15		C	11.83
Arm 2		3.1	13.67		B	
Arm 4		2.9	7.98		A	
	[Lane Simulation] - 2025 - Base					
Arm 1	D3	3.9	16.64		C	11.99
Arm 2		4.0	13.87		B	
Arm 4		3.0	7.90		A	
	[Lane Simulation] - 2030 - DM					
Arm 1	D7	12.9	51.43		F	29.33
Arm 2		10.6	34.76		D	
Arm 4		4.8	12.79		B	
	[Lane Simulation] - 2030 - DN					
Arm 1	D5	11.8	50.76		F	27.11
Arm 2		6.9	27.93		D	
Arm 4		4.7	12.54		B	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	
Location	
Site number	
Date	11/11/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DHA\Tom.Valek
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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	Do not calculate	-1	3	1	60	✓			320925171	186	15.91

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	Base	AM	ONE HOUR	07:45	09:15	15	✓
D3	2025	Base	AM	ONE HOUR	07:45	09:15	15	✓
D5	2030	DN	AM	ONE HOUR	07:45	09:15	15	✓
D7	2030	DM	AM	ONE HOUR	07:45	09:15	15	✓

Analysis Set Details

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

2023 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	11.83	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.83	B

Arms

Arms

Arm	Name	Description	No give-way line
1	A2 Westbound Off Slip		
2	A227 (S)		
3	A2 Westbound On Slip		
4	A227 (N)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	5.00	8.50	10.2	19.1	59.9	60.0	✓	
2	4.90	9.20	22.2	24.1	59.9	49.0		
3								✓
4	7.60	8.10	6.9	20.8	59.9	36.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.548	1805
2	0.622	2157
3		
4	0.671	2380

The slope and intercept shown above include any corrections and adjustments.

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1	Evenly split	10.00
2	Evenly split	10.00
3	Evenly split	10.00
4	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1	Entry	1	1	2, 3, 4	✓	4.00			0	99999	
			2	4	✓	4.00			0	99999	
		2	1	(2, 3, 4)		Infinity					
2	Entry	1	1	3, 4	✓	4.00			0	99999	
			2	2, 4	✓	4.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
3	Exit	1	1			Infinity					
4	Entry	1	1	2		Infinity			0	99999	
			2	2, 3, 4		Infinity			0	99999	
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1	Entry	1	1	0.274	903
			2	0.274	903
2	Entry	1	1	0.311	1079
			2	0.311	1079
4	Entry	1	1	0.335	1190
			2	0.335	1190

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			1	2	3	4
1	1	1		✓	✓	✓
		2				✓
	2	1		✓	✓	✓
2	1	1			✓	✓
		2		✓		✓
	2	1	✓	✓	✓	✓
4	1	1		✓		
		2		✓	✓	✓

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2023	Base	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	669	100.000
2		ONE HOUR	✓	764	100.000
3					
4		ONE HOUR	✓	1119	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	0	178	4	487
	2	0	0	251	513
	3	0	0	0	0
	4	0	456	662	1

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

	To				
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

	To				
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	16.15	3.3	C	616	925
2	13.67	3.1	B	700	1050
3					
4	7.98	2.9	A	1030	1545

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	513	128	848	513	506	0	0.0	1.2	7.904	A
2	568	142	881	566	571	480	0.0	1.3	6.746	A
3			0			697				
4	846	212	0	848	845	749	0.0	1.4	5.382	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	612	153	1021	606	604	0	1.2	2.1	9.700	A
2	692	173	1050	696	699	577	1.3	1.5	7.843	A
3			0			840				
4	1019	255	0	1021	1017	906	1.4	1.6	6.152	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	729	182	1229	729	739	0	2.1	3.3	16.148	C
2	832	208	1265	838	839	693	1.5	3.1	13.465	B
3			0			998				
4	1232	308	0	1229	1235	1105	1.6	2.8	7.982	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	737	184	1226	736	745	0	3.3	3.3	15.643	C
2	841	210	1270	845	847	691	3.1	3.1	13.674	B
3			0			1006				
4	1228	307	0	1226	1229	1109	2.8	2.9	7.937	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	602	151	1003	601	615	0	3.3	1.7	10.696	B
2	688	172	1038	690	698	566	3.1	1.5	8.864	A
3			0			825				
4	1004	251	0	1003	1007	903	2.9	2.0	6.175	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	505	126	851	509	512	0	1.7	1.0	8.115	A
2	579	145	886	583	588	474	1.5	1.0	6.933	A
3			0			714				
4	849	212	0	851	851	755	2.0	1.2	5.531	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	298	671	0.445	298	295	0.0	0.7	8.221	A
			2	4	215	671	0.321	215	211	0.0	0.5	7.125	A
		2	1	(2, 3, 4)	513			513	511	0.0	0.0	0.139	A
2	Entry	1	1	3, 4	351	805	0.436	350	350	0.0	0.8	7.041	A
			2	2, 4	217	805	0.270	216	221	0.0	0.4	5.909	A
		2	1	(1, 2, 3, 4)	568			568	576	0.0	0.0	0.143	A
	Exit	1	1		480			480	479	0.0	0.0	0.000	A
3	Exit	1	1		697			697	692	0.0	0.0	0.000	A
4	Entry	1	1	2	233	1190	0.196	234	234	0.0	0.2	3.739	A
			2	2, 3, 4	614	1190	0.516	613	612	0.0	1.1	6.008	A
	Exit	1	1		749			749	752	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	351	623	0.564	348	346	0.7	1.2	9.927	A
			2	4	260	623	0.417	258	258	0.5	0.7	8.528	A
		2	1	(2, 3, 4)	612			611	607	0.0	0.1	0.355	A
2	Entry	1	1	3, 4	411	752	0.547	414	415	0.8	0.9	8.089	A
			2	2, 4	281	752	0.374	283	283	0.4	0.5	6.741	A
		2	1	(1, 2, 3, 4)	692			693	700	0.0	0.0	0.299	A
	Exit	1	1		577			577	575	0.0	0.0	0.000	A
3	Exit	1	1		840			840	836	0.0	0.0	0.000	A
4	Entry	1	1	2	294	1190	0.247	296	295	0.2	0.3	4.081	A
			2	2, 3, 4	725	1190	0.609	725	721	1.1	1.3	7.001	A
	Exit	1	1		906			906	908	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	410	566	0.724	407	410	1.2	1.9	14.400	B
			2	4	320	566	0.565	321	328	0.7	1.1	12.314	B
		2	1	(2, 3, 4)	729			729	743	0.1	0.3	2.671	A
2	Entry	1	1	3, 4	476	685	0.694	475	478	0.9	1.6	11.894	B
			2	2, 4	363	685	0.530	364	361	0.5	0.9	9.253	A
		2	1	(1, 2, 3, 4)	832			839	843	0.0	0.5	2.683	A
	Exit	1	1		693			693	701	0.0	0.0	0.000	A
3	Exit	1	1		998			998	1006	0.0	0.0	0.000	A
4	Entry	1	1	2	386	1190	0.324	385	387	0.3	0.5	4.498	A
			2	2, 3, 4	846	1190	0.711	844	848	1.3	2.3	9.573	A
	Exit	1	1		1105			1105	1106	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	405	567	0.714	404	411	1.9	1.7	14.483	B
			2	4	331	567	0.584	331	334	1.1	1.1	12.235	B
		2	1	(2, 3, 4)	737			736	744	0.3	0.5	2.158	A
2	Entry	1	1	3, 4	484	684	0.707	482	480	1.6	1.7	12.406	B
			2	2, 4	362	684	0.529	362	367	0.9	1.0	9.573	A
		2	1	(1, 2, 3, 4)	841			845	848	0.5	0.3	2.511	A
	Exit	1	1		691			691	697	0.0	0.0	0.000	A
3	Exit	1	1		1006			1006	1010	0.0	0.0	0.000	A
4	Entry	1	1	2	385	1190	0.324	386	382	0.5	0.4	4.498	A
			2	2, 3, 4	844	1190	0.709	840	847	2.3	2.5	9.488	A
	Exit	1	1		1109			1109	1115	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	346	628	0.551	345	350	1.7	1.1	10.624	B
			2	4	256	628	0.408	256	264	1.1	0.7	9.281	A
		2	1	(2, 3, 4)	602			602	610	0.5	0.0	0.683	A
2	Entry	1	1	3, 4	409	756	0.542	410	412	1.7	0.9	8.897	A
			2	2, 4	280	756	0.371	280	285	1.0	0.5	7.288	A
		2	1	(1, 2, 3, 4)	688			690	692	0.3	0.0	0.646	A
	Exit	1	1		566			566	576	0.0	0.0	0.000	A
3	Exit	1	1		825			825	826	0.0	0.0	0.000	A
4	Entry	1	1	2	290	1190	0.244	288	294	0.4	0.5	3.953	A
			2	2, 3, 4	714	1190	0.600	715	713	2.5	1.5	7.096	A
	Exit	1	1		903			903	918	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	293	670	0.438	295	297	1.1	0.6	8.457	A
			2	4	212	670	0.317	214	215	0.7	0.4	7.301	A
		2	1	(2, 3, 4)	505			505	509	0.0	0.0	0.149	A
2	Entry	1	1	3, 4	353	803	0.440	355	355	0.9	0.6	7.277	A
			2	2, 4	227	803	0.283	228	233	0.5	0.4	6.004	A
		2	1	(1, 2, 3, 4)	579			580	586	0.0	0.0	0.161	A
	Exit	1	1		474			474	478	0.0	0.0	0.000	A
3	Exit	1	1		714			714	704	0.0	0.0	0.000	A
4	Entry	1	1	2	231	1190	0.194	231	234	0.5	0.3	3.792	A
			2	2, 3, 4	618	1190	0.519	620	617	1.5	1.0	6.193	A
	Exit	1	1		755			755	769	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	136	34	903	670	0.203	135	134	0.0	0.3	9.357	A
				3	3	0.82	476	357	0.009	3	3	0.0	0.0	9.334	A
				4	159	40	903	671	0.237	160	158	0.0	0.4	7.227	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	215	54	903	671	0.320	215	211	0.0	0.5	7.125	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	136	34	-	-	-	136	136	0.0	0.0	0.238	A
				3	3	0.82	-	-	-	3	3	0.0	0.0	0.139	A
				4	374	94	-	-	-	374	372	0.0	0.0	0.103	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	192	48	1079	805	0.239	192	188	0.0	0.5	7.965	A
				4	158	40	1079	805	0.197	158	162	0.0	0.3	5.962	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	217	54	1079	806	0.269	216	221	0.0	0.4	5.909	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	192	48	-	-	-	192	190	0.0	0.0	0.197	A
				4	376	94	-	-	-	376	386	0.0	0.0	0.117	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	233	58	1190	1190	0.196	234	234	0.0	0.2	3.739	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	110	28	1190	1190	0.093	111	111	0.0	0.1	3.784	A
				3	503	126	1190	1190	0.423	502	500	0.0	1.0	6.501	A
				4	0.65	0.16	192	192	0.003	0.65	0.75	0.0	0.0	5.488	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	163	41	903	624	0.261	162	160	0.3	0.7	11.618	B
				3	3	0.87	548	381	0.009	4	4	0.0	0.0	9.991	A
				4	185	46	903	624	0.296	183	182	0.4	0.6	8.430	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	260	65	903	624	0.416	258	258	0.5	0.7	8.528	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	164	41	-	-	-	163	161	0.0	0.1	0.506	A
				3	3	0.87	-	-	-	3	4	0.0	0.0	0.819	A
				4	445	111	-	-	-	444	441	0.0	0.1	0.295	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	230	57	1079	752	0.306	232	231	0.5	0.6	9.220	A
				4	181	45	1079	752	0.241	182	184	0.3	0.4	6.666	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	281	70	1079	752	0.374	283	283	0.4	0.5	6.741	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	229	57	-	-	-	230	232	0.0	0.0	0.433	A
				4	462	116	-	-	-	462	468	0.0	0.0	0.232	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	294	74	1190	1190	0.247	296	295	0.2	0.3	4.081	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	119	30	1190	1190	0.100	119	120	0.1	0.1	4.070	A
				3	605	151	1190	1190	0.508	605	600	1.0	1.2	7.580	A
				4	0.90	0.23	256	256	0.004	0.90	0.99	0.0	0.0	7.868	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	192	48	903	567	0.339	189	196	0.7	1.0	16.157	C
				3	4	0.90	573	358	0.010	3	4	0.0	0.0	13.667	B
				4	214	54	903	567	0.378	214	211	0.6	0.8	12.793	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	320	80	903	566	0.565	321	328	0.7	1.1	12.314	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	192	48	-	-	-	192	197	0.1	0.1	3.230	A
				3	3	0.87	-	-	-	4	4	0.0	0.0	2.952	A
				4	533	133	-	-	-	534	542	0.1	0.2	2.467	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	271	68	1079	686	0.395	270	274	0.6	1.1	13.486	B
				4	204	51	1079	686	0.298	204	204	0.4	0.6	9.760	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	363	91	1079	686	0.529	364	361	0.5	0.9	9.253	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	269	67	-	-	-	271	276	0.0	0.2	3.147	A
				4	563	141	-	-	-	568	568	0.0	0.3	2.459	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	386	96	1190	1190	0.324	385	387	0.3	0.5	4.498	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	119	30	1190	1190	0.100	118	118	0.1	0.1	4.429	A
				3	726	182	1190	1190	0.610	725	729	1.2	2.2	10.392	B
				4	0.97	0.24	281	281	0.003	0.97	1	0.0	0.0	10.355	B

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	193	48	903	567	0.341	191	199	1.0	0.9	16.405	C
				3	4	0.92	582	366	0.010	4	4	0.0	0.0	17.758	C
				4	208	52	903	567	0.366	209	209	0.8	0.7	12.592	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	331	83	903	566	0.584	331	334	1.1	1.1	12.235	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	193	48	-	-	-	193	198	0.1	0.1	2.638	A
				3	4	0.89	-	-	-	4	4	0.0	0.0	2.744	A
				4	540	135	-	-	-	539	542	0.2	0.3	1.979	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	278	70	1079	685	0.406	278	276	1.1	1.0	14.036	B
				4	205	51	1079	685	0.300	204	204	0.6	0.7	10.224	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	362	90	1079	684	0.529	362	367	0.9	1.0	9.573	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	277	69	-	-	-	278	276	0.2	0.1	2.974	A
				4	564	141	-	-	-	567	572	0.3	0.2	2.290	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	385	96	1190	1190	0.324	386	382	0.5	0.4	4.498	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	114	28	1190	1190	0.096	114	116	0.1	0.1	4.423	A
				3	728	182	1190	1190	0.612	724	730	2.2	2.4	10.289	B
				4	2	0.39	326	326	0.005	2	1	0.0	0.0	10.726	B

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	162	41	903	629	0.258	162	164	0.9	0.5	12.152	B
				3	3	0.74	442	303	0.010	3	3	0.0	0.0	11.855	B
				4	181	45	903	628	0.288	180	183	0.7	0.5	9.250	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	256	64	903	628	0.408	256	264	1.1	0.7	9.281	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	162	41	-	-	-	162	163	0.1	0.0	0.912	A
				3	3	0.73	-	-	-	3	3	0.0	0.0	1.093	A
				4	437	109	-	-	-	437	445	0.3	0.0	0.597	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	223	56	1079	757	0.294	224	228	1.0	0.6	10.174	B
				4	187	47	1079	755	0.247	187	184	0.7	0.4	7.313	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	280	70	1079	756	0.371	280	285	1.0	0.5	7.288	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	222	56	-	-	-	223	227	0.1	0.0	0.822	A
				4	466	117	-	-	-	467	466	0.2	0.0	0.560	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	290	73	1190	1190	0.244	288	294	0.4	0.5	3.953	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	116	29	1190	1190	0.097	115	118	0.1	0.2	4.038	A
				3	598	149	1190	1190	0.502	599	594	2.4	1.4	7.706	A
				4	0.58	0.15	230	230	0.003	0.58	0.92	0.0	0.0	8.135	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	136	34	903	670	0.203	137	135	0.5	0.3	9.558	A
				3	3	0.73	437	321	0.009	3	3	0.0	0.0	9.544	A
				4	154	39	903	670	0.230	155	159	0.5	0.2	7.501	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	212	53	903	670	0.317	214	215	0.7	0.4	7.301	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	136	34	-	-	-	136	134	0.0	0.0	0.240	A
				3	3	0.73	-	-	-	3	3	0.0	0.0	0.241	A
				4	366	92	-	-	-	366	372	0.0	0.0	0.116	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	197	49	1079	804	0.245	198	194	0.6	0.3	8.305	A
				4	156	39	1079	804	0.194	157	160	0.4	0.2	6.029	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	227	57	1079	803	0.283	228	233	0.5	0.4	6.004	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	197	49	-	-	-	197	193	0.0	0.0	0.265	A
				4	383	96	-	-	-	383	393	0.0	0.0	0.109	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	231	58	1190	1190	0.194	231	234	0.5	0.3	3.792	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	106	26	1190	1190	0.089	106	109	0.2	0.1	3.790	A
				3	511	128	1190	1190	0.430	513	507	1.4	0.9	6.712	A
				4	0.71	0.18	205	205	0.003	0.77	0.80	0.0	0.0	5.861	A

2025 | Base | AM

Data Errors and Warnings

Severity	Area	Item	Description
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	11.99	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.99	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2025	Base	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	679	100.000
2		ONE HOUR	✓	770	100.000
3					
4		ONE HOUR	✓	1127	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	181	4	494
	2	0	0	253	517
	3	0	0	0	0
	4	0	459	667	1

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

	To				
		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
From	4	10	10	10	10

Cyclist %

	To				
		1	2	3	4
	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
From	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	16.64	3.9	C	616	924
2	13.87	4.0	B	711	1067
3					
4	7.90	3.0	A	1026	1539

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	512	128	855	509	510	0	0.0	1.3	8.083	A
2	586	146	869	583	581	495	0.0	1.3	6.289	A
3			0			688				
4	857	214	0	855	852	765	0.0	1.5	5.384	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	607	152	1006	600	614	0	1.3	2.2	10.194	B
2	684	171	1031	691	704	576	1.3	1.4	8.082	A
3			0			838				
4	998	249	0	1006	1009	884	1.5	1.3	6.125	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	727	182	1262	719	737	0	2.2	3.9	15.447	C
2	866	217	1264	861	844	716	1.4	4.0	13.874	B
3			0			1017				
4	1258	315	0	1262	1251	1109	1.3	3.0	7.861	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	729	182	1235	721	747	0	3.9	3.2	16.643	C
2	847	212	1254	856	864	702	4.0	2.9	13.819	B
3			0			1006				
4	1229	307	0	1235	1246	1104	3.0	2.6	7.901	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	613	153	1003	617	622	0	3.2	1.3	10.775	B
2	695	174	1049	693	703	572	2.9	1.9	8.942	A
3			0			822				
4	1007	252	0	1003	1025	919	2.6	2.1	6.301	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	507	127	810	511	516	0	1.3	1.2	8.248	A
2	590	147	855	589	589	465	1.9	1.1	6.845	A
3			0			676				
4	808	202	0	810	843	769	2.1	1.1	5.453	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	293	668	0.439	294	294	0.0	0.7	8.430	A
			2	4	218	668	0.326	216	216	0.0	0.6	7.227	A
		2	1	(2, 3, 4)	512			511	515	0.0	0.0	0.162	A
2	Entry	1	1	3, 4	352	808	0.436	351	352	0.0	0.8	6.673	A
			2	2, 4	232	808	0.287	232	229	0.0	0.4	5.520	A
		2	1	(1, 2, 3, 4)	586			584	585	0.0	0.1	0.067	A
	Exit	1	1		495			495	486	0.0	0.0	0.000	A
3	Exit	1	1		688			688	693	0.0	0.0	0.000	A
4	Entry	1	1	2	239	1190	0.201	239	236	0.0	0.4	3.799	A
			2	2, 3, 4	618	1190	0.519	616	616	0.0	1.1	5.986	A
	Exit	1	1		765			765	763	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	351	627	0.559	348	353	0.7	1.2	10.244	B
			2	4	256	627	0.409	253	261	0.6	1.0	8.656	A
		2	1	(2, 3, 4)	607			607	618	0.0	0.0	0.626	A
2	Entry	1	1	3, 4	404	758	0.533	406	417	0.8	1.0	8.230	A
			2	2, 4	282	758	0.373	286	287	0.4	0.4	6.927	A
		2	1	(1, 2, 3, 4)	684			687	705	0.1	0.0	0.384	A
	Exit	1	1		576			576	575	0.0	0.0	0.000	A
3	Exit	1	1		838			838	838	0.0	0.0	0.000	A
4	Entry	1	1	2	288	1190	0.242	289	291	0.4	0.3	4.041	A
			2	2, 3, 4	710	1190	0.596	717	719	1.1	1.0	6.961	A
	Exit	1	1		884			884	915	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	401	557	0.720	401	409	1.2	1.8	14.261	B
			2	4	318	557	0.572	319	328	1.0	1.1	12.134	B
		2	1	(2, 3, 4)	727			720	740	0.0	0.9	2.095	A
2	Entry	1	1	3, 4	494	686	0.721	495	485	1.0	1.9	12.089	B
			2	2, 4	366	686	0.535	367	359	0.4	1.1	9.691	A
		2	1	(1, 2, 3, 4)	866			860	850	0.0	1.1	2.785	A
	Exit	1	1		716			716	710	0.0	0.0	0.000	A
3	Exit	1	1		1017			1017	1013	0.0	0.0	0.000	A
4	Entry	1	1	2	406	1190	0.342	408	398	0.3	0.6	4.593	A
			2	2, 3, 4	852	1190	0.716	854	853	1.0	2.4	9.382	A
	Exit	1	1		1109			1109	1110	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	397	564	0.704	397	411	1.8	1.6	15.040	C
			2	4	330	564	0.584	324	336	1.1	1.2	12.591	B
		2	1	(2, 3, 4)	729			727	746	0.9	0.4	2.722	A
2	Entry	1	1	3, 4	492	689	0.714	494	493	1.9	1.6	12.422	B
			2	2, 4	357	689	0.519	361	371	1.1	1.0	9.742	A
		2	1	(1, 2, 3, 4)	847			850	862	1.1	0.3	2.571	A
	Exit	1	1		702			702	709	0.0	0.0	0.000	A
3	Exit	1	1		1006			1006	1021	0.0	0.0	0.000	A
4	Entry	1	1	2	390	1190	0.327	392	393	0.6	0.6	4.500	A
			2	2, 3, 4	840	1190	0.706	844	853	2.4	2.0	9.472	A
	Exit	1	1		1104			1104	1127	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	354	628	0.564	356	354	1.6	0.7	10.835	B
			2	4	260	628	0.415	262	268	1.2	0.6	9.353	A
		2	1	(2, 3, 4)	613			614	616	0.4	0.0	0.608	A
2	Entry	1	1	3, 4	405	752	0.538	403	412	1.6	1.2	9.094	A
			2	2, 4	290	752	0.385	289	291	1.0	0.6	7.313	A
		2	1	(1, 2, 3, 4)	695			694	701	0.3	0.1	0.602	A
	Exit	1	1		572			572	581	0.0	0.0	0.000	A
3	Exit	1	1		822			822	841	0.0	0.0	0.000	A
4	Entry	1	1	2	289	1190	0.243	288	301	0.6	0.5	4.042	A
			2	2, 3, 4	718	1190	0.603	715	724	2.0	1.6	7.244	A
	Exit	1	1		919			919	928	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	296	681	0.435	299	297	0.7	0.7	8.642	A
			2	4	211	681	0.309	212	219	0.6	0.4	7.320	A
		2	1	(2, 3, 4)	507			507	515	0.0	0.1	0.170	A
2	Entry	1	1	3, 4	357	812	0.439	356	357	1.2	0.7	7.017	A
			2	2, 4	234	812	0.288	233	231	0.6	0.4	6.141	A
		2	1	(1, 2, 3, 4)	590			590	585	0.1	0.0	0.177	A
	Exit	1	1		465			465	479	0.0	0.0	0.000	A
3	Exit	1	1		676			676	696	0.0	0.0	0.000	A
4	Entry	1	1	2	220	1190	0.185	220	236	0.5	0.1	3.885	A
			2	2, 3, 4	588	1190	0.494	590	607	1.6	1.0	6.060	A
	Exit	1	1		769			769	772	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	138	35	903	671	0.206	137	135	0.0	0.4	9.767	A
				3	3	0.73	451	336	0.009	3	3	0.0	0.0	9.170	A
				4	152	38	903	668	0.228	154	156	0.0	0.3	7.248	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	218	54	903	669	0.325	216	216	0.0	0.6	7.227	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	138	35	-	-	-	138	137	0.0	0.0	0.217	A
				3	3	0.73	-	-	-	3	3	0.0	0.0	0.332	A
				4	370	92	-	-	-	370	375	0.0	0.0	0.140	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	191	48	1079	808	0.236	188	189	0.0	0.5	7.344	A
				4	162	40	1079	808	0.200	163	162	0.0	0.3	5.891	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	232	58	1079	810	0.286	232	229	0.0	0.4	5.520	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	192	48	-	-	-	191	191	0.0	0.1	0.121	A
				4	394	99	-	-	-	394	394	0.0	0.1	0.041	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	239	60	1190	1190	0.201	239	236	0.0	0.4	3.799	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	119	30	1190	1190	0.100	119	115	0.0	0.2	3.657	A
				3	498	125	1190	1190	0.419	497	501	0.0	0.9	6.520	A
				4	0.31	0.08	153	153	0.002	0.31	0.51	0.0	0.0	6.231	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	176	44	903	626	0.280	173	169	0.4	0.7	11.889	B
				3	4	1	509	358	0.011	4	3	0.0	0.0	11.321	B
				4	171	43	903	629	0.272	170	181	0.3	0.5	8.667	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	256	64	903	628	0.408	253	261	0.6	1.0	8.656	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	176	44	-	-	-	176	170	0.0	0.0	0.911	A
				3	4	1	-	-	-	4	3	0.0	0.0	0.529	A
				4	427	107	-	-	-	427	445	0.0	0.0	0.517	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	231	58	1079	758	0.305	231	232	0.5	0.7	9.315	A
				4	173	43	1079	758	0.228	174	185	0.3	0.3	6.865	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	282	71	1079	757	0.373	286	287	0.4	0.4	6.927	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	230	57	-	-	-	231	233	0.1	0.0	0.524	A
				4	454	114	-	-	-	456	472	0.1	0.0	0.315	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	288	72	1190	1190	0.242	289	291	0.4	0.3	4.041	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	113	28	1190	1190	0.095	114	116	0.2	0.1	3.926	A
				3	596	149	1190	1190	0.501	603	602	0.9	0.9	7.535	A
				4	0.92	0.23	198	198	0.005	0.92	0.82	0.0	0.0	7.966	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	193	48	903	555	0.347	193	193	0.7	1.0	16.041	C
				3	4	0.88	544	343	0.010	4	4	0.0	0.0	17.439	C
				4	205	51	903	557	0.368	203	211	0.5	0.9	12.566	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	318	80	903	557	0.572	319	328	1.0	1.1	12.134	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	194	49	-	-	-	193	194	0.0	0.3	2.584	A
				3	4	0.88	-	-	-	4	4	0.0	0.0	1.724	A
				4	528	132	-	-	-	524	542	0.0	0.6	1.922	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	278	69	1079	686	0.405	276	275	0.7	1.2	13.549	B
				4	217	54	1079	687	0.315	219	210	0.3	0.6	10.158	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	366	92	1079	686	0.534	367	359	0.4	1.1	9.691	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	280	70	-	-	-	278	278	0.0	0.4	3.372	A
				4	587	147	-	-	-	583	573	0.0	0.6	2.500	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	406	102	1190	1190	0.342	408	398	0.3	0.6	4.593	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	116	29	1190	1190	0.098	115	119	0.1	0.2	4.618	A
				3	734	184	1190	1190	0.617	736	733	0.9	2.3	10.152	B
				4	1	0.35	320	320	0.004	1	1	0.0	0.0	9.966	A

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	190	47	903	565	0.336	189	196	1.0	0.8	16.860	C
				3	5	1	567	355	0.013	5	4	0.0	0.0	18.447	C
				4	203	51	903	566	0.359	203	210	0.9	0.7	13.263	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	330	82	903	564	0.584	324	336	1.1	1.2	12.591	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	189	47	-	-	-	190	196	0.3	0.1	3.289	A
				3	5	1	-	-	-	5	5	0.0	0.0	3.454	A
				4	534	134	-	-	-	533	546	0.6	0.3	2.513	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	281	70	1079	690	0.407	280	284	1.2	1.0	13.974	B
				4	210	53	1079	689	0.305	214	209	0.6	0.6	10.317	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	357	89	1079	689	0.519	361	371	1.1	1.0	9.742	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	279	70	-	-	-	281	283	0.4	0.1	2.949	A
				4	568	142	-	-	-	569	579	0.6	0.2	2.388	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	390	97	1190	1190	0.327	392	393	0.6	0.6	4.500	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	122	30	1190	1190	0.102	121	119	0.2	0.2	4.375	A
				3	716	179	1190	1190	0.602	721	732	2.3	1.9	10.293	B
				4	2	0.38	275	275	0.006	2	1	0.0	0.0	16.345	C

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	166	41	903	626	0.265	167	165	0.8	0.3	12.329	B
				3	2	0.62	498	333	0.007	3	4	0.0	0.0	13.073	B
				4	186	47	903	627	0.297	185	185	0.7	0.4	9.455	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	260	65	903	627	0.415	262	268	1.2	0.6	9.353	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	166	41	-	-	-	166	163	0.1	0.0	0.895	A
				3	2	0.62	-	-	-	2	4	0.0	0.0	1.300	A
				4	444	111	-	-	-	446	449	0.3	0.0	0.498	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	223	56	1079	751	0.296	222	229	1.0	0.7	10.383	B
				4	182	46	1079	755	0.242	182	183	0.6	0.5	7.477	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	290	72	1079	752	0.385	289	291	1.0	0.6	7.313	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	223	56	-	-	-	223	228	0.1	0.1	0.812	A
				4	472	118	-	-	-	472	472	0.2	0.0	0.501	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	289	72	1190	1190	0.243	288	301	0.6	0.5	4.042	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	117	29	1190	1190	0.098	116	115	0.2	0.2	4.080	A
				3	601	150	1190	1190	0.505	598	608	1.9	1.4	7.843	A
				4	0.62	0.15	198	198	0.003	0.62	0.82	0.0	0.0	7.940	A

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	132	33	903	680	0.193	132	135	0.3	0.5	9.745	A
				3	3	0.73	417	311	0.009	3	3	0.0	0.0	10.252	B
				4	162	40	903	680	0.238	164	159	0.4	0.2	7.670	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	211	53	903	680	0.310	212	219	0.6	0.4	7.320	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	132	33	-	-	-	132	135	0.0	0.0	0.291	A
				3	3	0.73	-	-	-	3	3	0.0	0.0	0.000	A
				4	373	93	-	-	-	372	377	0.0	0.0	0.127	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	197	49	1079	813	0.243	197	195	0.7	0.5	7.895	A
				4	159	40	1079	813	0.196	160	163	0.5	0.2	5.974	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	234	58	1079	810	0.289	233	231	0.6	0.4	6.141	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	197	49	-	-	-	197	194	0.1	0.0	0.243	A
				4	393	98	-	-	-	393	392	0.0	0.0	0.144	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	220	55	1190	1190	0.185	220	236	0.5	0.1	3.885	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	113	28	1190	1190	0.095	113	109	0.2	0.2	3.737	A
				3	474	119	1190	1190	0.399	476	498	1.4	0.8	6.575	A
				4	0.46	0.12	122	122	0.004	0.46	0.46	0.0	0.0	2.696	A

2030 | DN | AM

Data Errors and Warnings

Severity	Area	Item	Description
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	27.11	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	27.11	D

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2030	DN	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	775	100.000
2		ONE HOUR	✓	817	100.000
3					
4		ONE HOUR	✓	1313	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	192	4	579
	2	0	0	267	550
	3	0	0	0	0
	4	0	488	824	1

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

	To				
		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
From	4	10	10	10	10

Cyclist %

	To				
		1	2	3	4
	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
From	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	50.76	11.8	F	711	1066
2	27.93	6.9	D	747	1120
3					
4	12.54	4.7	B	1195	1792

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	585	146	983	576	577	0	0.0	2.0	9.598	A
2	605	151	1049	605	605	510	0.0	1.4	7.706	A
3			0			816				
4	979	245	0	983	973	838	0.0	1.5	6.286	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	703	176	1166	698	706	0	2.0	3.1	13.648	B
2	734	184	1247	732	739	616	1.4	2.3	10.377	B
3			0			969				
4	1160	290	0	1166	1187	1010	1.5	2.5	8.087	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	847	212	1446	842	829	0	3.1	10.2	33.515	D
2	895	224	1552	887	891	736	2.3	6.9	23.072	C
3			0			1206				
4	1439	360	0	1446	1454	1233	2.5	4.6	12.017	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	850	213	1458	847	854	0	10.2	11.8	50.755	F
2	896	224	1570	904	901	735	6.9	6.8	27.931	D
3			0			1220				
4	1446	362	0	1458	1444	1253	4.6	4.7	12.542	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	696	174	1176	696	738	0	11.8	2.8	20.736	C
2	743	186	1266	748	758	606	6.8	1.9	14.511	B
3			0			979				
4	1172	293	0	1176	1197	1035	4.7	2.6	8.254	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	584	146	977	583	592	0	2.8	1.6	10.177	B
2	608	152	1054	604	619	507	1.9	1.5	7.804	A
3			0			814				
4	974	243	0	977	986	843	2.6	1.8	6.576	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	334	633	0.527	329	329	0.0	1.2	9.705	A
			2	4	250	633	0.395	248	248	0.0	0.7	8.605	A
		2	1	(2, 3, 4)	585			584	585	0.0	0.1	0.358	A
2	Entry	1	1	3, 4	361	752	0.480	360	361	0.0	0.9	8.105	A
			2	2, 4	245	752	0.325	245	244	0.0	0.5	6.636	A
		2	1	(1, 2, 3, 4)	605			605	611	0.0	0.0	0.193	A
	Exit	1	1		510			510	507	0.0	0.0	0.000	A
3	Exit	1	1		816			816	809	0.0	0.0	0.000	A
4	Entry	1	1	2	265	1190	0.223	266	263	0.0	0.3	4.014	A
			2	2, 3, 4	714	1190	0.600	718	711	0.0	1.2	7.119	A
	Exit	1	1		838			838	839	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	387	583	0.663	385	391	1.2	1.5	12.846	B
			2	4	311	583	0.533	313	315	0.7	1.0	11.057	B
		2	1	(2, 3, 4)	703			698	708	0.1	0.6	1.573	A
2	Entry	1	1	3, 4	427	691	0.618	426	430	0.9	1.3	10.306	B
			2	2, 4	309	691	0.447	307	309	0.5	0.9	8.142	A
		2	1	(1, 2, 3, 4)	734			735	742	0.0	0.1	0.972	A
	Exit	1	1		616			616	618	0.0	0.0	0.000	A
3	Exit	1	1		969			969	991	0.0	0.0	0.000	A
4	Entry	1	1	2	338	1190	0.284	337	343	0.3	0.4	4.315	A
			2	2, 3, 4	822	1190	0.691	829	843	1.2	2.1	9.621	A
	Exit	1	1		1010			1010	1023	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	453	507	0.894	451	445	1.5	3.1	20.939	C
			2	4	393	507	0.776	391	384	1.0	2.1	17.854	C
		2	1	(2, 3, 4)	847			846	840	0.6	5.0	13.862	B
2	Entry	1	1	3, 4	496	596	0.832	497	500	1.3	2.4	15.839	C
			2	2, 4	391	596	0.656	390	391	0.9	1.5	12.724	B
		2	1	(1, 2, 3, 4)	895			887	899	0.1	3.0	8.506	A
	Exit	1	1		736			736	747	0.0	0.0	0.000	A
3	Exit	1	1		1206			1206	1207	0.0	0.0	0.000	A
4	Entry	1	1	2	446	1190	0.375	448	455	0.4	0.5	5.071	A
			2	2, 3, 4	993	1190	0.834	998	999	2.1	4.1	15.152	C
	Exit	1	1		1233			1233	1221	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	448	503	0.890	449	455	3.1	2.8	22.882	C
			2	4	398	503	0.792	398	399	2.1	2.1	19.318	C
		2	1	(2, 3, 4)	850			846	853	5.0	6.9	29.568	D
2	Entry	1	1	3, 4	502	590	0.850	501	505	2.4	2.6	17.153	C
			2	2, 4	399	590	0.676	402	396	1.5	1.4	13.657	B
		2	1	(1, 2, 3, 4)	896			901	901	3.0	2.9	12.327	B
	Exit	1	1		735			735	749	0.0	0.0	0.000	A
3	Exit	1	1		1220			1220	1206	0.0	0.0	0.000	A
4	Entry	1	1	2	450	1190	0.378	450	452	0.5	0.7	5.139	A
			2	2, 3, 4	996	1190	0.837	1009	992	4.1	4.0	15.925	C
	Exit	1	1		1253			1253	1244	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	383	580	0.659	382	403	2.8	1.5	15.225	C
			2	4	313	580	0.539	314	335	2.1	1.1	13.221	B
		2	1	(2, 3, 4)	696			695	728	6.9	0.3	6.775	A
2	Entry	1	1	3, 4	433	685	0.632	436	435	2.6	1.1	12.525	B
			2	2, 4	311	685	0.455	311	323	1.4	0.8	9.946	A
		2	1	(1, 2, 3, 4)	743			744	750	2.9	0.0	3.231	A
	Exit	1	1		606			606	623	0.0	0.0	0.000	A
3	Exit	1	1		979			979	1002	0.0	0.0	0.000	A
4	Entry	1	1	2	338	1190	0.284	341	346	0.7	0.3	4.442	A
			2	2, 3, 4	833	1190	0.700	836	851	4.0	2.3	9.799	A
	Exit	1	1		1035			1035	1067	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	333	635	0.524	332	332	1.5	0.9	10.167	B
			2	4	251	635	0.396	251	259	1.1	0.7	8.959	A
		2	1	(2, 3, 4)	584			584	588	0.3	0.0	0.557	A
2	Entry	1	1	3, 4	360	751	0.480	358	368	1.1	0.9	8.175	A
			2	2, 4	247	751	0.329	246	250	0.8	0.5	6.773	A
		2	1	(1, 2, 3, 4)	608			608	617	0.0	0.0	0.205	A
	Exit	1	1		507			507	511	0.0	0.0	0.000	A
3	Exit	1	1		814			814	826	0.0	0.0	0.000	A
4	Entry	1	1	2	262	1190	0.220	264	266	0.3	0.2	3.982	A
			2	2, 3, 4	712	1190	0.598	713	720	2.3	1.6	7.542	A
	Exit	1	1		843			843	860	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	147	37	903	634	0.232	144	143	0.0	0.6	11.328	B
				3	3	0.63	441	310	0.008	3	3	0.0	0.0	8.992	A
				4	184	46	903	634	0.291	182	183	0.0	0.6	8.433	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	250	62	903	633	0.395	248	248	0.0	0.7	8.605	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	148	37	-	-	-	147	145	0.0	0.1	0.611	A
				3	3	0.63	-	-	-	3	3	0.0	0.0	0.945	A
				4	434	109	-	-	-	434	437	0.0	0.0	0.269	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	197	49	1079	752	0.262	197	198	0.0	0.5	9.281	A
				4	164	41	1079	753	0.217	163	164	0.0	0.4	6.675	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	245	61	1079	753	0.325	245	244	0.0	0.5	6.636	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	196	49	-	-	-	197	200	0.0	0.0	0.325	A
				4	408	102	-	-	-	409	411	0.0	0.0	0.128	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	265	66	1190	1190	0.223	266	263	0.0	0.3	4.014	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	99	25	1190	1190	0.083	100	102	0.0	0.1	3.963	A
				3	615	154	1190	1190	0.516	617	608	0.0	1.1	7.643	A
				4	0.37	0.09	166	166	0.002	0.47	0.62	0.0	0.0	5.821	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	177	44	903	582	0.303	176	176	0.6	0.8	14.763	B
				3	3	0.77	476	305	0.010	3	3	0.0	0.0	16.948	C
				4	207	52	903	582	0.356	206	212	0.6	0.7	11.194	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	311	78	903	583	0.534	313	315	0.7	1.0	11.057	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	178	45	-	-	-	177	177	0.1	0.2	2.196	A
				3	3	0.79	-	-	-	3	3	0.0	0.0	3.148	A
				4	521	130	-	-	-	518	528	0.0	0.4	1.355	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	243	61	1079	691	0.351	242	244	0.5	0.9	11.801	B
				4	184	46	1079	691	0.266	184	186	0.4	0.4	8.350	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	309	77	1079	690	0.447	307	309	0.5	0.9	8.142	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	242	61	-	-	-	243	245	0.0	0.1	1.313	A
				4	492	123	-	-	-	492	497	0.0	0.1	0.804	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	338	84	1190	1190	0.284	337	343	0.3	0.4	4.315	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	103	26	1190	1190	0.086	104	99	0.1	0.1	4.353	A
				3	719	180	1190	1190	0.604	724	744	1.1	2.0	10.318	B
				4	0.84	0.21	221	221	0.004	0.84	0.84	0.0	0.0	8.880	A

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	204	51	903	506	0.402	204	206	0.8	1.5	22.780	C
				3	4	1	553	314	0.013	4	4	0.0	0.0	22.975	C
				4	245	61	903	506	0.485	242	235	0.7	1.6	19.287	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	393	98	903	507	0.776	391	384	1.0	2.1	17.854	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	205	51	-	-	-	204	209	0.2	1.5	15.501	C
				3	4	1	-	-	-	4	4	0.0	0.0	17.663	C
				4	637	159	-	-	-	638	627	0.4	3.6	13.287	B
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	287	72	1079	597	0.480	289	291	0.9	1.4	17.335	C
				4	209	52	1079	598	0.349	208	209	0.4	1.0	13.768	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	391	98	1079	597	0.655	390	391	0.9	1.5	12.724	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	290	72	-	-	-	287	293	0.1	1.1	9.545	A
				4	605	151	-	-	-	600	605	0.1	1.9	8.003	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	446	111	1190	1190	0.375	448	455	0.4	0.5	5.071	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	84	21	1190	1190	0.071	84	85	0.1	0.1	5.137	A
				3	907	227	1190	1190	0.763	913	912	2.0	4.0	16.083	C
				4	2	0.40	323	323	0.005	1	1	0.0	0.0	17.827	C

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	200	50	903	503	0.397	201	211	1.5	1.3	24.283	C
				3	4	1	581	329	0.014	4	4	0.0	0.0	23.039	C
				4	243	61	903	505	0.482	244	240	1.6	1.5	21.647	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	398	100	903	504	0.791	398	399	2.1	2.1	19.318	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	202	50	-	-	-	200	210	1.5	1.7	31.198	D
				3	5	1	-	-	-	4	4	0.0	0.0	31.042	D
				4	644	161	-	-	-	642	638	3.6	5.2	29.021	D
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	293	73	1079	592	0.495	294	297	1.4	1.5	18.449	C
				4	209	52	1079	591	0.354	208	208	1.0	1.0	15.286	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	399	100	1079	590	0.676	402	396	1.5	1.4	13.657	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	291	73	-	-	-	293	297	1.1	1.0	13.359	B
				4	605	151	-	-	-	608	604	1.9	1.9	11.818	B
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	450	113	1190	1190	0.378	450	452	0.5	0.7	5.139	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	84	21	1190	1190	0.071	85	86	0.1	0.1	5.079	A
				3	911	228	1190	1190	0.765	922	905	4.0	3.9	16.944	C
				4	1	0.33	415	415	0.003	2	2	0.0	0.0	16.060	C

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	164	41	903	580	0.283	163	178	1.3	0.7	17.255	C
				3	4	1	518	323	0.012	4	4	0.0	0.0	15.533	C
				4	214	54	903	580	0.369	215	221	1.5	0.7	13.589	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	313	78	903	581	0.539	314	335	2.1	1.1	13.221	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	165	41	-	-	-	164	176	1.7	0.1	8.039	A
				3	4	1	-	-	-	4	4	0.0	0.0	8.280	A
				4	527	132	-	-	-	527	549	5.2	0.2	6.359	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	240	60	1079	684	0.351	243	248	1.5	0.6	14.142	B
				4	193	48	1079	684	0.282	194	187	1.0	0.5	10.387	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	311	78	1079	686	0.454	311	323	1.4	0.8	9.946	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	240	60	-	-	-	240	244	1.0	0.0	3.663	A
				4	503	126	-	-	-	505	505	1.9	0.0	3.022	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	338	85	1190	1190	0.284	341	346	0.7	0.3	4.442	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	102	25	1190	1190	0.085	102	99	0.1	0.1	4.337	A
				3	731	183	1190	1190	0.614	732	751	3.9	2.1	10.525	B
				4	1	0.26	203	203	0.005	1	0.93	0.0	0.0	11.439	B

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	143	36	903	637	0.225	142	145	0.7	0.5	11.842	B
				3	3	0.84	462	321	0.010	3	3	0.0	0.0	12.168	B
				4	186	47	903	636	0.293	187	184	0.7	0.4	8.810	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	251	63	903	637	0.394	251	259	1.1	0.7	8.959	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	143	36	-	-	-	143	144	0.1	0.0	0.753	A
				3	3	0.84	-	-	-	3	3	0.0	0.0	0.476	A
				4	438	109	-	-	-	437	440	0.2	0.0	0.494	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	201	50	1079	751	0.268	199	203	0.6	0.6	9.222	A
				4	159	40	1079	752	0.212	159	165	0.5	0.3	6.890	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	247	62	1079	752	0.329	246	250	0.8	0.5	6.773	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	201	50	-	-	-	201	203	0.0	0.0	0.323	A
				4	407	102	-	-	-	407	414	0.0	0.0	0.148	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	262	65	1190	1190	0.220	264	266	0.3	0.2	3.982	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	100	25	1190	1190	0.084	101	100	0.1	0.1	4.008	A
				3	612	153	1190	1190	0.514	612	619	2.1	1.5	8.108	A
				4	0.65	0.16	203	203	0.003	0.65	0.81	0.0	0.0	7.280	A

2030 | DM | AM

Data Errors and Warnings

Severity	Area	Item	Description
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	29.33	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	29.33	D

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2030	DM	AM	ONE HOUR	07:45	09:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	779	100.000
2		ONE HOUR	✓	854	100.000
3					
4		ONE HOUR	✓	1322	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	196	4	579
	2	0	0	291	563
	3	0	0	0	0
	4	0	497	824	1

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

	To				
		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
From	4	10	10	10	10

Cyclist %

	To				
		1	2	3	4
	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
From	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	51.43	12.9	F	718	1076
2	34.76	10.6	D	786	1180
3					
4	12.79	4.8	B	1217	1826

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	592	148	1004	591	587	0	0.0	1.8	9.752	A
2	634	159	1059	633	634	536	0.0	1.5	7.872	A
3			0			835				
4	1003	251	0	1004	995	857	0.0	1.8	6.508	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	701	175	1196	701	706	0	1.8	2.7	13.732	B
2	769	192	1270	768	772	628	1.5	2.5	11.019	B
3			0			1010				
4	1197	299	0	1196	1193	1028	1.8	2.9	8.211	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	858	214	1452	846	826	0	2.7	10.8	34.967	D
2	940	235	1536	943	929	763	2.5	7.4	24.635	C
3			0			1226				
4	1454	364	0	1452	1458	1253	2.9	4.8	12.049	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	863	216	1464	852	853	0	10.8	12.9	51.427	F
2	952	238	1562	936	936	754	7.4	10.6	34.763	D
3			0			1246				
4	1457	364	0	1464	1472	1253	4.8	4.5	12.790	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	703	176	1193	706	745	0	12.9	3.4	24.793	C
2	771	193	1265	773	809	634	10.6	2.5	17.823	C
3			0			1003				
4	1192	298	0	1193	1195	1035	4.5	2.5	8.337	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	588	147	997	587	599	0	3.4	1.8	10.755	B
2	653	163	1065	655	661	520	2.5	1.5	8.618	A
3			0			857				
4	1001	250	0	997	1004	862	2.5	1.9	6.613	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	338	628	0.538	337	334	0.0	1.0	9.867	A
			2	4	255	628	0.407	254	253	0.0	0.7	8.544	A
		2	1	(2, 3, 4)	592			593	594	0.0	0.1	0.452	A
2	Entry	1	1	3, 4	378	749	0.504	378	380	0.0	0.9	8.206	A
			2	2, 4	256	749	0.341	255	255	0.0	0.5	6.580	A
		2	1	(1, 2, 3, 4)	634			634	640	0.0	0.1	0.313	A
	Exit	1	1		536			536	524	0.0	0.0	0.000	A
3	Exit	1	1		835			835	835	0.0	0.0	0.000	A
4	Entry	1	1	2	277	1190	0.233	277	273	0.0	0.3	3.938	A
			2	2, 3, 4	727	1190	0.611	727	723	0.0	1.5	7.472	A
	Exit	1	1		857			857	858	0.0	0.0	0.000	A

08:00 - 08:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	391	575	0.680	389	391	1.0	1.5	13.112	B
			2	4	312	575	0.542	312	315	0.7	1.0	11.074	B
		2	1	(2, 3, 4)	701			703	709	0.1	0.2	1.513	A
2	Entry	1	1	3, 4	448	684	0.655	447	449	0.9	1.4	10.762	B
			2	2, 4	320	684	0.468	321	323	0.5	0.7	8.535	A
		2	1	(1, 2, 3, 4)	769			768	775	0.1	0.4	1.173	A
	Exit	1	1		628			628	626	0.0	0.0	0.000	A
3	Exit	1	1		1010			1010	1013	0.0	0.0	0.000	A
4	Entry	1	1	2	349	1190	0.294	350	348	0.3	0.4	4.348	A
			2	2, 3, 4	847	1190	0.712	846	845	1.5	2.4	9.791	A
	Exit	1	1		1028			1028	1032	0.0	0.0	0.000	A

08:15 - 08:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	452	505	0.895	450	445	1.5	2.9	20.782	C
			2	4	397	505	0.786	396	381	1.0	2.3	17.582	C
		2	1	(2, 3, 4)	858			849	837	0.2	5.5	15.507	C
2	Entry	1	1	3, 4	528	601	0.879	529	526	1.4	2.5	16.452	C
			2	2, 4	414	601	0.688	413	403	0.7	1.6	12.989	B
		2	1	(1, 2, 3, 4)	940			942	937	0.4	3.3	9.623	A
	Exit	1	1		763			763	761	0.0	0.0	0.000	A
3	Exit	1	1		1226			1226	1225	0.0	0.0	0.000	A
4	Entry	1	1	2	466	1190	0.391	465	465	0.4	0.8	5.190	A
			2	2, 3, 4	989	1190	0.831	987	993	2.4	4.1	15.253	C
	Exit	1	1		1253			1253	1228	0.0	0.0	0.000	A

08:30 - 08:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	453	502	0.903	452	456	2.9	3.1	23.461	C
			2	4	402	502	0.801	400	397	2.3	2.4	19.717	C
		2	1	(2, 3, 4)	863			855	854	5.5	7.4	29.724	D
2	Entry	1	1	3, 4	526	593	0.888	526	526	2.5	2.8	18.233	C
			2	2, 4	409	593	0.691	410	410	1.6	1.6	14.300	B
		2	1	(1, 2, 3, 4)	952			936	937	3.3	6.2	18.191	C
	Exit	1	1		754			754	765	0.0	0.0	0.000	A
3	Exit	1	1		1246			1246	1242	0.0	0.0	0.000	A
4	Entry	1	1	2	464	1190	0.390	465	471	0.8	0.6	5.176	A
			2	2, 3, 4	994	1190	0.835	999	1001	4.1	3.9	16.377	C
	Exit	1	1		1253			1253	1253	0.0	0.0	0.000	A

08:45 - 09:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	389	576	0.676	389	406	3.1	1.6	16.116	C
			2	4	317	576	0.551	317	339	2.4	1.1	13.437	B
		2	1	(2, 3, 4)	703			706	734	7.4	0.6	10.281	B
2	Entry	1	1	3, 4	453	685	0.661	452	468	2.8	1.5	13.164	B
			2	2, 4	320	685	0.466	321	341	1.6	0.8	10.629	B
		2	1	(1, 2, 3, 4)	771			773	801	6.2	0.2	5.994	A
	Exit	1	1		634			634	638	0.0	0.0	0.000	A
3	Exit	1	1		1003			1003	1026	0.0	0.0	0.000	A
4	Entry	1	1	2	346	1190	0.291	347	347	0.6	0.4	4.363	A
			2	2, 3, 4	846	1190	0.711	846	848	3.9	2.2	9.966	A
	Exit	1	1		1035			1035	1085	0.0	0.0	0.000	A

09:00 - 09:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	337	629	0.535	335	339	1.6	1.1	10.488	B
			2	4	251	629	0.399	252	261	1.1	0.6	8.959	A
		2	1	(2, 3, 4)	588			587	595	0.6	0.1	0.964	A
2	Entry	1	1	3, 4	393	748	0.526	394	395	1.5	0.9	8.802	A
			2	2, 4	259	748	0.347	261	267	0.8	0.5	7.140	A
		2	1	(1, 2, 3, 4)	653			652	657	0.2	0.1	0.500	A
	Exit	1	1		520			520	525	0.0	0.0	0.000	A
3	Exit	1	1		857			857	861	0.0	0.0	0.000	A
4	Entry	1	1	2	271	1190	0.228	270	275	0.4	0.3	4.026	A
			2	2, 3, 4	730	1190	0.613	727	729	2.2	1.5	7.593	A
	Exit	1	1		862			862	879	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

07:45 - 08:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	155	39	903	628	0.246	154	147	0.0	0.6	11.234	B
				3	3	0.68	410	285	0.010	3	3	0.0	0.0	10.467	B
				4	180	45	903	627	0.287	181	184	0.0	0.5	8.752	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	255	64	903	629	0.406	254	253	0.0	0.7	8.544	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	154	38	-	-	-	155	149	0.0	0.0	0.693	A
				3	3	0.68	-	-	-	3	3	0.0	0.0	0.615	A
				4	435	109	-	-	-	435	442	0.0	0.0	0.369	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	211	53	1079	748	0.283	211	214	0.0	0.6	9.439	A
				4	166	42	1079	749	0.222	167	166	0.0	0.3	6.608	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	256	64	1079	750	0.341	255	255	0.0	0.5	6.580	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	211	53	-	-	-	211	217	0.0	0.0	0.458	A
				4	423	106	-	-	-	422	423	0.0	0.1	0.239	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	277	69	1190	1190	0.233	277	273	0.0	0.3	3.938	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	105	26	1190	1190	0.089	105	104	0.0	0.1	3.956	A
				3	621	155	1190	1190	0.522	621	618	0.0	1.4	8.059	A
				4	0.57	0.14	180	180	0.003	0.62	0.65	0.0	0.0	4.887	A

08:00 - 08:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	175	44	903	575	0.304	175	178	0.6	0.7	14.888	B
				3	4	0.88	525	337	0.010	4	4	0.0	0.0	15.027	C
				4	212	53	903	574	0.370	211	209	0.5	0.8	11.566	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	312	78	903	575	0.542	312	315	0.7	1.0	11.074	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	175	44	-	-	-	175	179	0.0	0.1	2.017	A
				3	4	0.91	-	-	-	4	4	0.0	0.0	2.048	A
				4	523	131	-	-	-	524	526	0.0	0.1	1.337	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	265	66	1079	684	0.387	265	265	0.6	1.0	12.218	B
				4	183	46	1079	683	0.268	183	185	0.3	0.4	8.678	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	320	80	1079	684	0.468	321	323	0.5	0.7	8.535	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	265	66	-	-	-	265	266	0.0	0.2	1.440	A
				4	503	126	-	-	-	503	509	0.1	0.2	1.034	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	349	87	1190	1190	0.294	350	348	0.3	0.4	4.348	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	103	26	1190	1190	0.086	103	100	0.1	0.1	4.359	A
				3	743	186	1190	1190	0.625	742	744	1.4	2.3	10.518	B
				4	1	0.26	194	194	0.005	1	0.78	0.0	0.0	10.366	B

08:15 - 08:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	213	53	903	505	0.422	213	208	0.7	1.5	22.412	C
				3	5	1	550	311	0.015	5	4	0.0	0.0	23.383	C
				4	234	58	903	506	0.462	233	233	0.8	1.5	19.279	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	397	99	903	505	0.786	396	381	1.0	2.3	17.582	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	215	54	-	-	-	213	211	0.1	1.4	16.869	C
				3	5	1	-	-	-	5	4	0.0	0.0	15.716	C
				4	638	159	-	-	-	630	622	0.1	4.1	15.046	C
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	318	80	1079	602	0.529	320	316	1.0	1.6	17.919	C
				4	210	53	1079	601	0.349	210	210	0.4	0.9	14.242	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	414	103	1079	601	0.688	413	403	0.7	1.6	12.989	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	318	79	-	-	-	318	319	0.2	1.2	10.633	B
				4	622	156	-	-	-	624	619	0.2	2.1	9.104	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	466	116	1190	1190	0.391	465	465	0.4	0.8	5.190	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	85	21	1190	1190	0.071	85	88	0.1	0.1	5.094	A
				3	903	226	1190	1190	0.759	901	904	2.3	4.0	16.219	C
				4	1	0.25	294	294	0.003	1	1	0.0	0.0	18.471	C

08:30 - 08:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	210	52	903	501	0.419	209	212	1.5	1.6	25.047	D
				3	5	1	626	345	0.015	5	5	0.0	0.0	25.529	D
				4	238	59	903	501	0.474	238	239	1.5	1.5	21.991	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	402	100	903	501	0.801	400	397	2.3	2.4	19.717	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	214	53	-	-	-	210	212	1.4	2.0	31.550	D
				3	5	1	-	-	-	5	5	0.0	0.0	33.591	D
				4	644	161	-	-	-	639	636	4.1	5.4	29.078	D
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	324	81	1079	593	0.546	323	320	1.6	1.9	19.614	C
				4	202	51	1079	594	0.341	203	207	0.9	0.9	16.083	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	409	102	1079	593	0.691	410	410	1.6	1.6	14.300	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	329	82	-	-	-	324	321	1.2	2.1	19.589	C
				4	623	156	-	-	-	612	616	2.1	4.0	17.464	C
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	464	116	1190	1190	0.390	465	471	0.8	0.6	5.176	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	80	20	1180	1180	0.068	80	83	0.1	0.1	5.151	A
				3	912	228	1190	1190	0.767	917	917	4.0	3.7	17.388	C
				4	1	0.31	265	265	0.005	1	1	0.0	0.0	17.397	C

08:45 - 09:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	183	46	903	577	0.318	183	191	1.6	0.8	18.132	C
				3	3	0.65	504	313	0.008	2	3	0.0	0.0	17.117	C
				4	203	51	903	577	0.353	204	212	1.5	0.8	14.284	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	317	79	903	576	0.551	317	339	2.4	1.1	13.437	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	182	46	-	-	-	183	188	2.0	0.2	10.963	B
				3	3	0.66	-	-	-	3	3	0.0	0.0	11.399	B
				4	518	129	-	-	-	521	543	5.4	0.5	10.039	B
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	262	65	1079	686	0.381	260	276	1.9	0.9	14.627	B
				4	192	48	1079	684	0.280	193	192	0.9	0.5	11.060	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	320	80	1079	685	0.466	321	341	1.6	0.8	10.629	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	261	65	-	-	-	262	272	2.1	0.1	6.581	A
				4	510	128	-	-	-	511	529	4.0	0.1	5.690	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	346	86	1190	1190	0.291	347	347	0.6	0.4	4.363	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	104	26	1190	1190	0.087	104	100	0.1	0.1	4.279	A
				3	741	185	1190	1190	0.623	741	747	3.7	2.1	10.740	B
				4	0.91	0.23	247	247	0.004	0.91	1	0.0	0.0	11.047	B

09:00 - 09:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	154	38	903	631	0.244	153	154	0.8	0.5	12.192	B
				3	4	0.90	529	365	0.010	4	3	0.0	0.0	11.569	B
				4	179	45	903	629	0.284	178	181	0.8	0.6	9.035	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	251	63	903	630	0.398	252	261	1.1	0.6	8.959	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	154	39	-	-	-	154	152	0.2	0.0	1.223	A
				3	4	0.90	-	-	-	4	3	0.0	0.0	0.854	A
				4	430	108	-	-	-	430	439	0.5	0.1	0.876	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	222	56	1079	749	0.297	224	225	0.9	0.5	9.986	A
				4	171	43	1079	749	0.228	170	170	0.5	0.4	7.227	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	259	65	1079	749	0.346	261	267	0.8	0.5	7.140	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	223	56	-	-	-	222	223	0.1	0.1	0.671	A
				4	431	108	-	-	-	430	434	0.1	0.0	0.411	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	271	68	1190	1190	0.228	270	275	0.4	0.3	4.026	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	96	24	1190	1190	0.080	96	96	0.1	0.1	4.055	A
				3	633	158	1190	1190	0.532	630	632	2.1	1.4	8.137	A
				4	0.96	0.24	194	194	0.005	0.96	0.75	0.0	0.0	9.750	A

Junctions 11						
ARCADY 11 - Roundabout Module						
Version: 11.0.0.2177						
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Filename: LS - A2 - A227 - PM - Rose Farm.j11

Path: C:\Users\Tom.Valek\OneDriveCloudTemp\Z51DNXGN

Report generation date: 06/05/2026 11:07:54

»2023 | Base | PM

»2025 | Base | PM

»2030 | DN | PM

»2030 | DM | PM

Summary of junction performance

	PM					
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)
	[Lane Simulation] - 2023 - Base					
Arm 1	D2	6.2	31.15		D	13.45
Arm 2		2.9	9.73		A	
Arm 4		2.2	6.18		A	
	[Lane Simulation] - 2025 - Base					
Arm 1	D4	6.7	33.65		D	14.11
Arm 2		2.5	9.75		A	
Arm 4		2.5	6.29		A	
	[Lane Simulation] - 2030 - DM					
Arm 1	D8	37.8	153.69		F	45.86
Arm 2		3.5	13.54		B	
Arm 4		3.5	7.60		A	
	[Lane Simulation] - 2030 - DN					
Arm 1	D6	31.0	127.71		F	39.98
Arm 2		4.0	13.75		B	
Arm 4		3.2	7.57		A	

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

File summary

File Description

Title	
Location	
Site number	
Date	11/11/2025
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DHA\Tom.Valek
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	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use simulation for HCM roundabouts	Use iterations for HCM roundabouts
5.75						0.85	36.00	20.00		

Lane Simulation options

Criteria type	Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Calculate RFCs	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Average animation capture interval (s)	Use quick response	Do flow sampling	Suppress automatic lane creation	Last run random seed	Last run number of trials	Last run time taken (s)
Delay	1.00	100000	100000	Do not calculate	-1	3	1	60	✓			282173670	260	25.18

Demand Set Summary

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023	Base	PM	ONE HOUR	16:45	18:15	15	✓
D4	2025	Base	PM	ONE HOUR	16:45	18:15	15	✓
D6	2030	DN	PM	ONE HOUR	16:45	18:15	15	✓
D8	2030	DM	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2023 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	13.45	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	13.45	B

Arms

Arms

Arm	Name	Description	No give-way line
1	A2 Westbound Off Slip		
2	A227 (S)		
3	A2 Westbound On Slip		
4	A227 (N)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	I' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1	3.70	8.50	10.2	19.1	59.9	60.0	✓	
2	4.90	9.20	22.2	24.1	59.9	49.0		
3								✓
4	7.60	8.10	6.9	20.8	59.9	36.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1	0.499	1520
2	0.622	2157
3		
4	0.671	2380

The slope and intercept shown above include any corrections and adjustments.

Lane Simulation: Arm options

Arm	Lane capacity source	Traffic considering secondary lanes (%)
1	Evenly split	10.00
2	Evenly split	10.00
3	Evenly split	10.00
4	Evenly split	10.00

Lanes

Arm	Side	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Has bottleneck	Has obstruction	Minimum capacity (PCU/hr)	Maximum capacity (PCU/hr)	Signalised
1	Entry	1	1	2, 3, 4	✓	4.00			0	99999	
			2	4	✓	4.00			0	99999	
		2	1	(2, 3, 4)		Infinity					
2	Entry	1	1	3, 4	✓	4.00			0	99999	
			2	2, 4	✓	4.00			0	99999	
		2	1	(1, 2, 3, 4)		Infinity					
	Exit	1	1			Infinity					
3	Exit	1	1			Infinity					
4	Entry	1	1	2		Infinity			0	99999	
			2	2, 3, 4		Infinity			0	99999	
	Exit	1	1			Infinity					

Entry Lane slope and intercept

Arm	Side	Lane level	Lane	Final slope	Final intercept (PCU/hr)
1	Entry	1	1	0.249	760
			2	0.249	760
2	Entry	1	1	0.311	1079
			2	0.311	1079
4	Entry	1	1	0.335	1190
			2	0.335	1190

Summary of Entry Lane allowed movements

Arm	Lane Level	Lane	Destination arm			
			1	2	3	4
1	1	1		✓	✓	✓
		2				✓
	2	1		✓	✓	✓
2	1	1			✓	✓
		2		✓		✓
	2	1	✓	✓	✓	✓
4	1	1		✓		
		2		✓	✓	✓

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2023	Base	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	617	100.000
2		ONE HOUR	✓	768	100.000
3					
4		ONE HOUR	✓	1118	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
		1	2	3	4
From	1	0	169	1	447
	2	0	2	214	552
	3	0	0	0	0
	4	0	635	483	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

	To				
		1	2	3	4
From	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
	4	10	10	10	10

Cyclist %

	To				
		1	2	3	4
From	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	31.15	6.2	D	569	853
2	9.73	2.9	A	704	1056
3					
4	6.18	2.2	A	1025	1537

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	467	117	847	467	463	0	0.0	1.5	10.362	B
2	582	145	709	584	580	605	0.0	0.9	5.908	A
3			0			528				
4	846	211	2	845	842	763	0.0	1.2	4.718	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	554	139	1000	558	562	0	1.5	2.0	14.127	B
2	695	174	841	694	695	717	0.9	1.5	6.909	A
3			0			627				
4	1001	250	2	997	1011	905	1.2	1.7	5.281	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	683	171	1238	684	669	0	2.0	6.2	28.163	D
2	841	210	1032	834	842	889	1.5	2.9	9.465	A
3			0			765				
4	1235	309	2	1235	1239	1099	1.7	2.2	6.175	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	682	171	1218	686	692	0	6.2	5.6	31.152	D
2	831	208	1025	832	850	879	2.9	2.2	9.735	A
3			0			760				
4	1216	304	2	1216	1222	1095	2.2	2.0	5.962	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	552	138	1018	550	575	0	5.6	2.3	17.410	C
2	698	174	849	697	704	719	2.2	1.5	7.299	A
3			0			643				
4	1015	254	2	1016	1008	901	2.0	1.5	5.294	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	473	118	838	471	479	0	2.3	1.5	10.928	B
2	579	145	704	577	585	605	1.5	1.1	5.977	A
3			0			523				
4	837	209	1	837	848	757	1.5	1.2	4.707	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	268	549	0.489	268	267	0.0	0.9	10.699	B
			2	4	199	549	0.363	199	195	0.0	0.5	9.295	A
		2	1	(2, 3, 4)	467			467	468	0.0	0.0	0.251	A
2	Entry	1	1	3, 4	343	858	0.399	344	341	0.0	0.6	6.175	A
			2	2, 4	239	858	0.279	240	239	0.0	0.3	5.367	A
		2	1	(1, 2, 3, 4)	582			582	584	0.0	0.0	0.066	A
	Exit	1	1		605			605	604	0.0	0.0	0.000	A
3	Exit	1	1		528			528	526	0.0	0.0	0.000	A
4	Entry	1	1	2	299	1189	0.252	300	299	0.0	0.3	3.895	A
			2	2, 3, 4	546	1189	0.459	545	542	0.0	0.9	5.168	A
	Exit	1	1		763			763	754	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	314	511	0.614	316	317	0.9	1.1	13.780	B
			2	4	242	511	0.473	242	245	0.5	0.7	11.608	B
		2	1	(2, 3, 4)	554			556	563	0.0	0.1	1.284	A
2	Entry	1	1	3, 4	400	817	0.490	401	403	0.6	0.9	7.147	A
			2	2, 4	293	817	0.359	293	292	0.3	0.5	6.131	A
		2	1	(1, 2, 3, 4)	695			694	697	0.0	0.1	0.184	A
	Exit	1	1		717			717	725	0.0	0.0	0.000	A
3	Exit	1	1		627			627	638	0.0	0.0	0.000	A
4	Entry	1	1	2	362	1189	0.305	362	368	0.3	0.5	4.244	A
			2	2, 3, 4	638	1189	0.537	635	643	0.9	1.2	5.877	A
	Exit	1	1		905			905	905	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	378	452	0.836	376	366	1.1	2.5	20.739	C
			2	4	308	452	0.681	308	303	0.7	1.6	17.409	C
		2	1	(2, 3, 4)	683			686	678	0.1	2.1	8.835	A
2	Entry	1	1	3, 4	475	758	0.627	474	478	0.9	1.4	9.189	A
			2	2, 4	362	758	0.478	360	364	0.5	1.0	7.642	A
		2	1	(1, 2, 3, 4)	841			837	846	0.1	0.5	0.938	A
	Exit	1	1		889			889	892	0.0	0.0	0.000	A
3	Exit	1	1		765			765	767	0.0	0.0	0.000	A
4	Entry	1	1	2	475	1189	0.399	474	475	0.5	0.6	4.762	A
			2	2, 3, 4	760	1189	0.639	761	764	1.2	1.6	7.054	A
	Exit	1	1		1099			1099	1090	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	370	457	0.810	374	377	2.5	2.2	22.205	C
			2	4	313	457	0.686	313	315	1.6	1.7	18.299	C
		2	1	(2, 3, 4)	682			683	691	2.1	1.7	10.726	B
2	Entry	1	1	3, 4	469	760	0.617	470	478	1.4	1.2	9.462	A
			2	2, 4	362	760	0.476	362	372	1.0	0.8	7.862	A
		2	1	(1, 2, 3, 4)	831			830	848	0.5	0.2	0.980	A
	Exit	1	1		879			879	883	0.0	0.0	0.000	A
3	Exit	1	1		760			760	767	0.0	0.0	0.000	A
4	Entry	1	1	2	459	1189	0.386	458	463	0.6	0.6	4.672	A
			2	2, 3, 4	757	1189	0.637	758	760	1.6	1.4	6.750	A
	Exit	1	1		1095			1095	1115	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	313	507	0.617	312	323	2.2	1.2	15.223	C
			2	4	238	507	0.470	238	252	1.7	0.8	13.025	B
		2	1	(2, 3, 4)	552			551	567	1.7	0.3	3.316	A
2	Entry	1	1	3, 4	404	815	0.495	404	407	1.2	0.8	7.520	A
			2	2, 4	295	815	0.362	293	297	0.8	0.6	6.330	A
		2	1	(1, 2, 3, 4)	698			698	702	0.2	0.0	0.283	A
	Exit	1	1		719			719	730	0.0	0.0	0.000	A
3	Exit	1	1		643			643	634	0.0	0.0	0.000	A
4	Entry	1	1	2	367	1189	0.309	367	368	0.6	0.4	4.184	A
			2	2, 3, 4	648	1189	0.545	649	640	1.4	1.1	5.932	A
	Exit	1	1		901			901	923	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	273	551	0.495	272	277	1.2	0.9	11.153	B
			2	4	200	551	0.363	199	203	0.8	0.6	9.537	A
		2	1	(2, 3, 4)	473			473	477	0.3	0.0	0.490	A
2	Entry	1	1	3, 4	341	860	0.397	340	345	0.8	0.7	6.209	A
			2	2, 4	237	860	0.276	237	241	0.6	0.4	5.511	A
		2	1	(1, 2, 3, 4)	579			578	584	0.0	0.0	0.057	A
	Exit	1	1		605			605	617	0.0	0.0	0.000	A
3	Exit	1	1		523			523	529	0.0	0.0	0.000	A
4	Entry	1	1	2	291	1189	0.244	290	299	0.4	0.3	3.892	A
			2	2, 3, 4	547	1189	0.460	547	549	1.1	0.8	5.151	A
	Exit	1	1		757			757	767	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	121	30	760	550	0.221	122	124	0.0	0.5	12.281	B
				3	0.88	0.22	129	93	0.009	0.78	0.83	0.0	0.0	11.641	B
				4	146	37	760	549	0.266	145	142	0.0	0.4	9.302	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	199	50	760	550	0.362	199	195	0.0	0.5	9.295	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	121	30	-	-	-	121	126	0.0	0.0	0.388	A
				3	0.88	0.22	-	-	-	0.88	0.89	0.0	0.0	0.895	A
				4	345	86	-	-	-	345	341	0.0	0.0	0.198	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	164	41	1079	859	0.191	164	162	0.0	0.4	7.037	A
				4	179	45	1079	857	0.208	180	180	0.0	0.2	5.396	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.50	373	299	0.007	2	2	0.0	0.0	5.417	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	237	59	1079	858	0.277	238	237	0.0	0.3	5.366	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.50	-	-	-	2	2	0.0	0.0	0.118	A
				3	164	41	-	-	-	164	163	0.0	0.0	0.115	A
				4	416	104	-	-	-	416	419	0.0	0.0	0.047	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	299	75	1190	1189	0.252	300	299	0.0	0.3	3.895	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	181	45	1190	1189	0.152	182	179	0.0	0.2	3.867	A
				3	365	91	1190	1189	0.307	363	364	0.0	0.7	5.810	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	152	38	760	510	0.298	153	153	0.5	0.6	15.884	C
				3	0.92	0.23	137	93	0.010	0.92	0.95	0.0	0.0	16.705	C
				4	161	40	760	511	0.316	162	163	0.4	0.5	11.793	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	242	60	760	511	0.473	242	245	0.5	0.7	11.608	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	152	38	-	-	-	152	153	0.0	0.1	1.758	A
				3	0.92	0.23	-	-	-	0.92	0.91	0.0	0.0	1.631	A
				4	402	100	-	-	-	403	409	0.0	0.1	1.107	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	192	48	1079	815	0.235	191	196	0.4	0.5	8.169	A
				4	209	52	1079	817	0.256	210	207	0.2	0.4	6.176	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.57	436	330	0.007	2	2	0.0	0.0	7.194	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	291	73	1079	817	0.356	291	290	0.3	0.5	6.123	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.57	-	-	-	2	2	0.0	0.0	0.155	A
				3	192	48	-	-	-	192	196	0.0	0.0	0.300	A
				4	501	125	-	-	-	500	499	0.0	0.1	0.139	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	362	91	1190	1189	0.305	362	368	0.3	0.5	4.244	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	201	50	1190	1189	0.169	200	202	0.2	0.3	4.171	A
				3	437	109	1190	1189	0.368	435	441	0.7	1.0	6.657	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	184	46	760	452	0.407	183	182	0.6	1.4	22.812	C
				3	1	0.27	167	101	0.011	0.97	0.94	0.0	0.0	23.054	C
				4	193	48	760	453	0.425	192	183	0.5	1.1	18.642	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	308	77	760	452	0.681	308	303	0.7	1.6	17.409	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	183	46	-	-	-	184	186	0.1	0.6	9.949	A
				3	1	0.27	-	-	-	1	0.97	0.0	0.0	5.830	A
				4	499	125	-	-	-	500	491	0.1	1.5	8.420	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	232	58	1079	757	0.307	233	235	0.5	0.8	10.650	B
				4	242	61	1079	757	0.320	241	244	0.4	0.6	7.776	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	3	0.63	448	319	0.008	2	2	0.0	0.0	9.107	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	359	90	1079	758	0.474	358	361	0.5	1.0	7.632	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	3	0.65	-	-	-	3	3	0.0	0.0	1.335	A
				3	234	58	-	-	-	232	236	0.0	0.1	1.205	A
				4	605	151	-	-	-	602	608	0.1	0.3	0.833	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	475	119	1190	1189	0.399	474	475	0.5	0.6	4.762	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	230	58	1190	1189	0.194	230	233	0.3	0.4	4.811	A
				3	530	132	1190	1189	0.446	531	532	1.0	1.2	8.034	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	185	46	760	457	0.405	188	188	1.4	1.2	24.022	C
				3	0.97	0.24	187	111	0.009	0.97	1	0.0	0.0	24.667	C
				4	184	46	760	457	0.403	184	188	1.1	1.1	20.369	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	313	78	760	457	0.685	313	315	1.6	1.7	18.299	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	185	46	-	-	-	185	187	0.6	0.6	12.406	B
				3	0.97	0.24	-	-	-	0.97	1	0.0	0.0	14.708	B
				4	496	124	-	-	-	497	503	1.5	1.1	10.089	B
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	232	58	1079	759	0.305	232	235	0.8	0.7	10.916	B
				4	237	59	1079	760	0.312	238	242	0.6	0.5	8.059	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.50	390	275	0.007	2	2	0.0	0.0	8.598	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	360	90	1079	760	0.473	360	370	1.0	0.8	7.858	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.50	-	-	-	2	2	0.0	0.0	0.761	A
				3	232	58	-	-	-	232	235	0.1	0.1	1.250	A
				4	597	149	-	-	-	597	611	0.3	0.2	0.877	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	459	115	1190	1189	0.386	458	463	0.6	0.6	4.672	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	233	58	1190	1189	0.196	231	230	0.4	0.4	4.635	A
				3	525	131	1190	1189	0.441	527	530	1.2	1.0	7.665	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	149	37	760	508	0.294	150	158	1.2	0.6	17.299	C
				3	0.60	0.15	137	90	0.007	0.60	0.88	0.0	0.0	17.085	C
				4	163	41	760	507	0.321	162	164	1.1	0.6	13.213	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	238	60	760	507	0.470	238	252	1.7	0.8	13.025	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	150	37	-	-	-	149	156	0.6	0.1	4.166	A
				3	0.60	0.15	-	-	-	0.60	0.88	0.0	0.0	1.663	A
				4	401	100	-	-	-	401	411	1.1	0.2	2.998	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	194	48	1079	815	0.238	195	195	0.7	0.5	8.750	A
				4	209	52	1079	815	0.257	209	212	0.5	0.4	6.393	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.54	423	315	0.007	2	2	0.0	0.0	7.647	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	292	73	1079	815	0.359	291	294	0.8	0.6	6.320	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.54	-	-	-	2	2	0.0	0.0	0.191	A
				3	194	48	-	-	-	194	194	0.1	0.0	0.411	A
				4	502	125	-	-	-	502	505	0.2	0.0	0.235	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	367	92	1190	1189	0.309	367	368	0.6	0.4	4.184	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	201	50	1190	1189	0.169	201	202	0.4	0.2	4.252	A
				3	447	112	1190	1189	0.376	448	438	1.0	0.9	6.709	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	130	32	760	551	0.235	129	133	0.6	0.5	12.752	B
				3	1	0.28	146	106	0.010	1	0.97	0.0	0.0	12.260	B
				4	142	36	760	552	0.257	142	142	0.6	0.4	9.639	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	200	50	760	552	0.363	199	203	0.8	0.6	9.537	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	130	33	-	-	-	130	133	0.1	0.0	0.733	A
				3	1	0.28	-	-	-	1	1	0.0	0.0	0.248	A
				4	342	86	-	-	-	342	343	0.2	0.0	0.396	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	161	40	1079	860	0.187	160	162	0.5	0.4	7.114	A
				4	181	45	1079	860	0.210	180	182	0.4	0.3	5.409	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.36	307	243	0.006	1	1	0.0	0.0	7.502	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	236	59	1079	860	0.274	236	239	0.6	0.4	5.499	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.36	-	-	-	1	1	0.0	0.0	0.043	A
				3	161	40	-	-	-	161	162	0.0	0.0	0.109	A
				4	416	104	-	-	-	416	421	0.0	0.0	0.037	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	291	73	1190	1189	0.244	290	299	0.4	0.3	3.892	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	185	46	1190	1189	0.155	185	184	0.2	0.3	3.945	A
				3	362	90	1190	1189	0.304	362	366	0.9	0.6	5.757	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2025 | Base | PM

Data Errors and Warnings

Severity	Area	Item	Description
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	14.11	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.11	B

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2025	Base	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	625	100.000
2		ONE HOUR	✓	773	100.000
3					
4		ONE HOUR	✓	1125	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
From		1	2	3	4
	1	0	171	1	453
	2	0	2	215	556
	3	0	0	0	0
	4	0	639	486	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

	To				
		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
From	4	10	10	10	10

Cyclist %

	To				
		1	2	3	4
	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
From	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	33.65	6.7	D	571	857
2	9.75	2.5	A	706	1058
3					
4	6.29	2.5	A	1034	1551

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	472	118	846	473	471	0	0.0	1.5	10.373	B
2	579	145	708	578	577	611	0.0	1.1	5.933	A
3			0			528				
4	843	211	2	844	840	757	0.0	1.1	4.690	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	559	140	1011	560	560	0	1.5	2.5	14.046	B
2	690	172	836	691	699	736	1.1	1.4	6.971	A
3			0			623				
4	1008	252	2	1009	1022	901	1.1	1.4	5.238	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	685	171	1240	683	680	0	2.5	6.7	29.927	D
2	855	214	1030	858	860	893	1.4	2.4	9.746	A
3			0			777				
4	1239	310	2	1239	1242	1110	1.4	2.5	6.289	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	679	170	1241	684	693	0	6.7	6.2	33.645	D
2	840	210	1035	839	848	891	2.4	2.5	9.728	A
3			0			766				
4	1240	310	2	1239	1242	1106	2.5	2.5	6.281	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	555	139	1025	555	583	0	6.2	2.3	17.827	C
2	690	172	846	691	705	733	2.5	1.4	7.580	A
3			0			639				
4	1021	255	2	1022	1027	897	2.5	1.5	5.265	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	476	119	851	476	482	0	2.3	1.4	11.126	B
2	580	145	712	580	588	616	1.4	1.1	6.038	A
3			0			530				
4	852	213	1	850	855	760	1.5	1.1	4.714	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	277	549	0.504	277	275	0.0	0.9	10.750	B
			2	4	196	549	0.357	196	196	0.0	0.6	9.195	A
		2	1	(2, 3, 4)	472			473	476	0.0	0.0	0.271	A
2	Entry	1	1	3, 4	342	858	0.398	342	342	0.0	0.6	6.189	A
			2	2, 4	237	858	0.276	236	235	0.0	0.5	5.414	A
		2	1	(1, 2, 3, 4)	579			579	581	0.0	0.0	0.059	A
	Exit	1	1		611			611	607	0.0	0.0	0.000	A
3	Exit	1	1		528			528	527	0.0	0.0	0.000	A
4	Entry	1	1	2	296	1189	0.249	296	295	0.0	0.3	3.911	A
			2	2, 3, 4	547	1189	0.460	548	545	0.0	0.8	5.111	A
	Exit	1	1		757			757	754	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	316	508	0.622	317	318	0.9	1.4	13.842	B
			2	4	242	508	0.477	243	242	0.6	0.9	11.815	B
		2	1	(2, 3, 4)	559			559	563	0.0	0.2	1.060	A
2	Entry	1	1	3, 4	397	819	0.484	397	405	0.6	0.8	7.259	A
			2	2, 4	293	819	0.358	294	295	0.5	0.5	6.094	A
		2	1	(1, 2, 3, 4)	690			690	701	0.0	0.0	0.201	A
	Exit	1	1		736			736	740	0.0	0.0	0.000	A
3	Exit	1	1		623			623	639	0.0	0.0	0.000	A
4	Entry	1	1	2	372	1189	0.313	372	375	0.3	0.4	4.208	A
			2	2, 3, 4	636	1189	0.535	637	646	0.8	1.0	5.836	A
	Exit	1	1		901			901	903	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	369	451	0.819	369	370	1.4	2.5	21.550	C
			2	4	313	451	0.695	314	310	0.9	1.6	17.697	C
		2	1	(2, 3, 4)	685			683	687	0.2	2.6	10.012	B
2	Entry	1	1	3, 4	486	758	0.640	486	487	0.8	1.3	9.369	A
			2	2, 4	370	758	0.487	372	373	0.5	0.8	7.883	A
		2	1	(1, 2, 3, 4)	855			855	863	0.0	0.3	1.018	A
	Exit	1	1		893			893	893	0.0	0.0	0.000	A
3	Exit	1	1		777			777	777	0.0	0.0	0.000	A
4	Entry	1	1	2	478	1189	0.402	477	476	0.4	0.8	4.814	A
			2	2, 3, 4	761	1189	0.640	762	767	1.0	1.7	7.202	A
	Exit	1	1		1110			1110	1113	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	370	451	0.820	370	378	2.5	2.4	22.568	C
			2	4	313	451	0.693	314	315	1.6	1.5	19.059	C
		2	1	(2, 3, 4)	679			683	693	2.6	2.3	12.715	B
2	Entry	1	1	3, 4	473	757	0.625	474	480	1.3	1.3	9.407	A
			2	2, 4	366	757	0.484	365	368	0.8	0.9	7.919	A
		2	1	(1, 2, 3, 4)	840			840	849	0.3	0.3	0.964	A
	Exit	1	1		891			891	897	0.0	0.0	0.000	A
3	Exit	1	1		766			766	774	0.0	0.0	0.000	A
4	Entry	1	1	2	474	1189	0.398	473	476	0.8	0.7	4.779	A
			2	2, 3, 4	766	1189	0.644	766	766	1.7	1.8	7.215	A
	Exit	1	1		1106			1106	1111	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	315	505	0.623	315	327	2.4	1.2	15.821	C
			2	4	240	505	0.476	240	256	1.5	0.9	13.396	B
		2	1	(2, 3, 4)	555			555	576	2.3	0.1	3.249	A
2	Entry	1	1	3, 4	401	815	0.491	402	407	1.3	0.8	7.731	A
			2	2, 4	289	815	0.355	289	298	0.9	0.5	6.532	A
		2	1	(1, 2, 3, 4)	690			690	702	0.3	0.1	0.371	A
	Exit	1	1		733			733	747	0.0	0.0	0.000	A
3	Exit	1	1		639			639	643	0.0	0.0	0.000	A
4	Entry	1	1	2	375	1189	0.316	376	378	0.7	0.5	4.174	A
			2	2, 3, 4	646	1189	0.543	647	649	1.8	1.0	5.901	A
	Exit	1	1		897			897	926	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	274	548	0.500	274	275	1.2	0.8	11.413	B
			2	4	203	548	0.370	202	206	0.9	0.6	9.705	A
		2	1	(2, 3, 4)	476			476	479	0.1	0.0	0.463	A
2	Entry	1	1	3, 4	342	857	0.399	342	345	0.8	0.6	6.274	A
			2	2, 4	238	857	0.277	238	243	0.5	0.4	5.441	A
		2	1	(1, 2, 3, 4)	580			579	587	0.1	0.0	0.110	A
	Exit	1	1		616			616	618	0.0	0.0	0.000	A
3	Exit	1	1		530			530	533	0.0	0.0	0.000	A
4	Entry	1	1	2	307	1190	0.258	306	304	0.5	0.4	3.840	A
			2	2, 3, 4	545	1190	0.458	544	550	1.0	0.8	5.199	A
	Exit	1	1		760			760	773	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment
16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	131	33	760	550	0.238	131	129	0.0	0.5	12.356	B
				3	0.66	0.17	97	70	0.010	0.74	0.61	0.0	0.0	11.833	B
				4	145	36	760	549	0.264	145	145	0.0	0.4	9.297	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	196	49	760	549	0.357	196	196	0.0	0.6	9.195	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	131	33	-	-	-	131	131	0.0	0.0	0.418	A
				3	0.66	0.17	-	-	-	0.66	0.61	0.0	0.0	0.700	A
				4	341	85	-	-	-	341	345	0.0	0.0	0.214	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	160	40	1079	858	0.187	161	162	0.0	0.4	7.125	A
				4	181	45	1079	858	0.212	182	180	0.0	0.3	5.340	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.42	313	249	0.007	2	2	0.0	0.0	6.472	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	235	59	1079	858	0.274	234	234	0.0	0.4	5.407	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.42	-	-	-	2	2	0.0	0.0	0.104	A
				3	160	40	-	-	-	160	163	0.0	0.0	0.112	A
				4	417	104	-	-	-	417	416	0.0	0.0	0.038	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	296	74	1190	1189	0.249	296	295	0.0	0.3	3.911	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	182	45	1190	1189	0.153	182	181	0.0	0.2	3.889	A
				3	365	91	1190	1189	0.307	366	364	0.0	0.6	5.717	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	156	39	760	508	0.307	156	157	0.5	0.8	15.881	C
				3	1	0.26	183	123	0.009	0.98	1	0.0	0.0	16.948	C
				4	159	40	760	508	0.314	160	160	0.4	0.6	11.808	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	242	61	760	508	0.477	243	242	0.6	0.9	11.815	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	156	39	-	-	-	156	158	0.0	0.1	1.487	A
				3	1	0.26	-	-	-	1	1	0.0	0.0	1.062	A
				4	402	101	-	-	-	402	404	0.0	0.1	0.892	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	190	47	1079	819	0.232	191	197	0.4	0.4	8.364	A
				4	207	52	1079	819	0.252	206	208	0.3	0.4	6.218	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.58	358	273	0.008	2	2	0.0	0.0	7.649	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	291	73	1079	818	0.355	292	293	0.4	0.5	6.085	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.58	-	-	-	2	2	0.0	0.0	0.470	A
				3	190	47	-	-	-	190	197	0.0	0.0	0.312	A
				4	497	124	-	-	-	497	502	0.0	0.0	0.157	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	372	93	1190	1189	0.313	372	375	0.3	0.4	4.208	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	205	51	1190	1189	0.172	205	206	0.2	0.3	4.168	A
				3	431	108	1190	1189	0.362	432	441	0.6	0.7	6.615	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	189	47	760	451	0.419	188	185	0.8	1.5	23.649	C
				3	1	0.26	144	86	0.012	1	1	0.0	0.0	23.360	C
				4	179	45	760	451	0.398	180	184	0.6	1.0	19.395	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	313	78	760	451	0.694	314	310	0.9	1.6	17.697	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	190	47	-	-	-	189	188	0.1	0.8	11.513	B
				3	1	0.32	-	-	-	1	0.98	0.0	0.0	19.612	C
				4	494	123	-	-	-	493	498	0.1	1.8	9.422	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	241	60	1079	758	0.319	241	239	0.4	0.8	10.756	B
				4	244	61	1079	758	0.322	246	247	0.4	0.5	8.025	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.43	362	259	0.007	2	2	0.0	0.0	10.473	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	368	92	1079	758	0.485	370	371	0.5	0.8	7.871	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.43	-	-	-	2	2	0.0	0.0	1.454	A
				3	242	60	-	-	-	241	241	0.0	0.1	1.376	A
				4	612	153	-	-	-	612	620	0.0	0.2	0.878	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	478	119	1190	1189	0.402	477	476	0.4	0.8	4.814	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	228	57	1190	1189	0.192	226	230	0.3	0.4	4.827	A
				3	533	133	1190	1189	0.448	535	536	0.7	1.3	8.219	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	186	47	760	451	0.412	184	190	1.5	1.3	24.370	C
				3	0.90	0.22	161	95	0.009	0.90	1	0.0	0.0	23.870	C
				4	183	46	760	450	0.406	185	187	1.0	1.0	20.742	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	313	78	760	451	0.694	314	315	1.6	1.5	19.059	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	185	46	-	-	-	186	189	0.8	0.7	13.924	B
				3	0.90	0.22	-	-	-	0.90	1	0.0	0.0	16.171	C
				4	492	123	-	-	-	496	502	1.8	1.6	12.253	B
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	231	58	1079	757	0.304	231	237	0.8	0.7	10.826	B
				4	243	61	1079	756	0.321	244	243	0.5	0.5	8.026	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.49	436	306	0.006	2	2	0.0	0.0	9.664	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	364	91	1079	757	0.481	363	366	0.8	0.9	7.908	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.49	-	-	-	2	2	0.0	0.0	1.283	A
				3	230	58	-	-	-	231	237	0.1	0.1	1.212	A
				4	608	152	-	-	-	607	610	0.2	0.2	0.867	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	474	118	1190	1189	0.398	473	476	0.8	0.7	4.779	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	232	58	1190	1189	0.195	232	229	0.4	0.4	4.682	A
				3	534	134	1190	1189	0.449	535	536	1.3	1.4	8.301	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	153	38	760	506	0.303	153	162	1.3	0.7	17.928	C
				3	0.74	0.19	149	96	0.008	0.74	0.95	0.0	0.0	18.824	C
				4	161	40	760	506	0.318	162	164	1.0	0.5	13.742	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	240	60	760	505	0.476	240	256	1.5	0.9	13.396	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	153	38	-	-	-	153	159	0.7	0.0	4.023	A
				3	0.74	0.19	-	-	-	0.74	0.94	0.0	0.0	4.573	A
				4	401	100	-	-	-	401	416	1.6	0.1	2.951	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	194	48	1079	815	0.238	194	198	0.7	0.5	8.921	A
				4	207	52	1079	816	0.253	208	210	0.5	0.3	6.607	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.55	379	282	0.008	2	2	0.0	0.0	7.328	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	287	72	1079	815	0.352	287	296	0.9	0.5	6.527	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.55	-	-	-	2	2	0.0	0.0	0.767	A
				3	194	48	-	-	-	194	197	0.1	0.0	0.511	A
				4	494	123	-	-	-	494	503	0.2	0.0	0.315	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	375	94	1190	1189	0.316	376	378	0.7	0.5	4.174	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	203	51	1190	1189	0.171	203	205	0.4	0.3	4.174	A
				3	443	111	1190	1189	0.372	444	444	1.4	0.8	6.705	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	130	33	760	548	0.238	129	131	0.7	0.5	13.097	B
				3	0.86	0.21	139	98	0.009	0.90	0.89	0.0	0.0	12.384	B
				4	143	36	760	549	0.260	144	143	0.5	0.3	9.869	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	203	51	760	548	0.370	202	206	0.9	0.6	9.705	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	130	33	-	-	-	130	130	0.0	0.0	0.691	A
				3	0.86	0.21	-	-	-	0.86	0.89	0.0	0.0	0.000	A
				4	345	86	-	-	-	345	348	0.1	0.0	0.378	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	164	41	1079	858	0.191	164	164	0.5	0.4	7.137	A
				4	178	45	1079	858	0.208	178	182	0.3	0.3	5.495	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.27	278	219	0.005	1	1	0.0	0.0	5.534	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	237	59	1079	857	0.276	237	241	0.5	0.4	5.440	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.27	-	-	-	1	1	0.0	0.0	0.000	A
				3	164	41	-	-	-	164	163	0.0	0.0	0.175	A
				4	415	104	-	-	-	415	422	0.0	0.0	0.085	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	307	77	1190	1190	0.258	306	304	0.5	0.4	3.840	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	179	45	1190	1190	0.151	179	182	0.3	0.2	3.912	A
				3	365	91	1190	1190	0.307	365	368	0.8	0.6	5.835	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2030 | DN | PM

Data Errors and Warnings

Severity	Area	Item	Description
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	39.98	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	39.98	E

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2030	DN	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	715	100.000
2		ONE HOUR	✓	826	100.000
3					
4		ONE HOUR	✓	1274	100.000

Origin-Destination Data

Demand (PCU/hr)

		To			
		1	2	3	4
From	1	0	178	1	536
	2	0	2	232	592
	3	0	0	0	0
	4	0	679	595	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

	To				
		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
From	4	10	10	10	10

Cyclist %

	To				
		1	2	3	4
	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
From	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	127.71	31.0	F	656	985
2	13.75	4.0	B	762	1142
3					
4	7.57	3.2	A	1160	1740

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	533	133	969	535	531	0	0.0	2.0	12.142	B
2	617	154	851	615	612	653	0.0	1.4	6.713	A
3			0			625				
4	967	242	1	968	961	840	0.0	1.5	5.120	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	648	162	1139	652	643	0	2.0	3.7	19.906	C
2	744	186	1025	747	750	766	1.4	1.5	7.975	A
3			0			747				
4	1141	285	2	1138	1137	1024	1.5	2.2	5.899	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	778	195	1382	730	724	0	3.7	19.7	67.482	F
2	926	232	1199	920	907	912	1.5	4.0	12.952	B
3			0			932				
4	1380	345	3	1379	1404	1185	2.2	3.2	7.472	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	802	200	1398	768	753	0	19.7	31.0	127.712	F
2	929	232	1241	934	926	925	4.0	3.3	13.753	B
3			0			922				
4	1397	349	2	1396	1407	1251	3.2	3.0	7.565	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	628	157	1134	676	733	0	31.0	6.7	73.656	F
2	732	183	1042	738	757	768	3.3	1.3	9.164	A
3			0			751				
4	1130	283	1	1133	1150	1027	3.0	1.8	5.992	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	550	137	943	557	570	0	6.7	1.7	16.302	C
2	621	155	855	620	636	645	1.3	1.1	6.697	A
3			0			615				
4	946	236	2	941	958	858	1.8	1.6	5.274	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	302	519	0.582	303	297	0.0	1.2	12.458	B
			2	4	231	519	0.445	232	233	0.0	0.7	10.512	B
		2	1	(2, 3, 4)	533			533	539	0.0	0.1	0.531	A
2	Entry	1	1	3, 4	359	814	0.442	359	358	0.0	0.8	7.001	A
			2	2, 4	257	814	0.316	256	255	0.0	0.6	5.860	A
		2	1	(1, 2, 3, 4)	617			617	618	0.0	0.0	0.184	A
	Exit	1	1		653			653	642	0.0	0.0	0.000	A
3	Exit	1	1		625			625	625	0.0	0.0	0.000	A
4	Entry	1	1	2	331	1189	0.278	332	329	0.0	0.4	4.081	A
			2	2, 3, 4	637	1189	0.535	636	631	0.0	1.1	5.663	A
	Exit	1	1		840			840	837	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	358	476	0.751	361	353	1.2	1.8	17.575	C
			2	4	292	476	0.612	292	290	0.7	1.4	15.000	C
		2	1	(2, 3, 4)	648			649	648	0.1	0.6	3.459	A
2	Entry	1	1	3, 4	429	760	0.565	431	431	0.8	0.8	8.080	A
			2	2, 4	315	760	0.415	316	319	0.6	0.6	6.937	A
		2	1	(1, 2, 3, 4)	744			744	750	0.0	0.0	0.384	A
	Exit	1	1		766			766	766	0.0	0.0	0.000	A
3	Exit	1	1		747			747	747	0.0	0.0	0.000	A
4	Entry	1	1	2	414	1189	0.348	414	413	0.4	0.5	4.375	A
			2	2, 3, 4	727	1189	0.611	724	723	1.1	1.7	6.773	A
	Exit	1	1		1024			1024	1016	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	390	416	0.937	391	387	1.8	3.4	28.935	D
			2	4	343	416	0.825	339	337	1.4	2.7	24.602	C
		2	1	(2, 3, 4)	778			733	736	0.6	13.5	40.272	E
2	Entry	1	1	3, 4	519	706	0.735	515	509	0.8	1.9	11.333	B
			2	2, 4	406	706	0.575	405	398	0.6	1.3	9.396	A
		2	1	(1, 2, 3, 4)	926			924	914	0.0	0.9	2.450	A
	Exit	1	1		912			912	927	0.0	0.0	0.000	A
3	Exit	1	1		932			932	924	0.0	0.0	0.000	A
4	Entry	1	1	2	517	1189	0.435	516	531	0.5	0.9	5.224	A
			2	2, 3, 4	863	1189	0.726	863	874	1.7	2.2	8.841	A
	Exit	1	1		1185			1185	1185	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	411	412	0.998	411	404	3.4	3.8	31.897	D
			2	4	356	412	0.865	356	349	2.7	3.0	28.150	D
		2	1	(2, 3, 4)	802			767	756	13.5	24.2	97.574	F
2	Entry	1	1	3, 4	512	693	0.739	515	514	1.9	1.8	12.093	B
			2	2, 4	420	693	0.606	419	412	1.3	1.2	10.163	B
		2	1	(1, 2, 3, 4)	929			932	926	0.9	0.3	2.531	A
	Exit	1	1		925			925	940	0.0	0.0	0.000	A
3	Exit	1	1		922			922	917	0.0	0.0	0.000	A
4	Entry	1	1	2	529	1189	0.445	531	543	0.9	0.8	5.417	A
			2	2, 3, 4	869	1189	0.730	866	864	2.2	2.2	8.904	A
	Exit	1	1		1251			1251	1229	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	360	478	0.754	362	389	3.8	2.0	25.589	D
			2	4	310	478	0.649	314	344	3.0	1.5	21.291	C
		2	1	(2, 3, 4)	628			670	721	24.2	3.1	51.127	F
2	Entry	1	1	3, 4	423	755	0.561	426	433	1.8	0.8	9.126	A
			2	2, 4	309	755	0.410	312	325	1.2	0.5	7.862	A
		2	1	(1, 2, 3, 4)	732			732	751	0.3	0.0	0.584	A
	Exit	1	1		768			768	796	0.0	0.0	0.000	A
3	Exit	1	1		751			751	756	0.0	0.0	0.000	A
4	Entry	1	1	2	411	1190	0.345	412	418	0.8	0.6	4.449	A
			2	2, 3, 4	720	1190	0.605	721	732	2.2	1.2	6.881	A
	Exit	1	1		1027			1027	1089	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	305	525	0.581	308	313	2.0	1.0	14.463	B
			2	4	245	525	0.466	249	257	1.5	0.6	11.993	B
		2	1	(2, 3, 4)	550			550	562	3.1	0.1	3.187	A
2	Entry	1	1	3, 4	364	813	0.448	363	372	0.8	0.8	6.950	A
			2	2, 4	257	813	0.317	257	263	0.5	0.4	5.994	A
		2	1	(1, 2, 3, 4)	621			621	635	0.0	0.0	0.145	A
	Exit	1	1		645			645	657	0.0	0.0	0.000	A
3	Exit	1	1		615			615	620	0.0	0.0	0.000	A
4	Entry	1	1	2	323	1189	0.272	322	331	0.6	0.5	4.181	A
			2	2, 3, 4	622	1189	0.523	619	627	1.2	1.1	5.848	A
	Exit	1	1		858			858	887	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment
16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	138	35	760	519	0.266	137	130	0.0	0.7	14.669	B
				3	0.71	0.18	181	124	0.006	0.71	1	0.0	0.0	13.021	B
				4	163	41	760	518	0.315	166	166	0.0	0.5	10.699	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	231	58	760	519	0.445	232	233	0.0	0.7	10.512	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	138	35	-	-	-	138	133	0.0	0.0	0.750	A
				3	0.71	0.18	-	-	-	0.71	1	0.0	0.0	0.906	A
				4	395	99	-	-	-	394	404	0.0	0.0	0.458	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	171	43	1079	815	0.210	171	173	0.0	0.4	8.148	A
				4	188	47	1079	814	0.231	188	185	0.0	0.4	5.929	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.39	395	297	0.005	1	2	0.0	0.0	6.905	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	256	64	1079	814	0.315	255	253	0.0	0.5	5.852	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.39	-	-	-	2	2	0.0	0.0	0.000	A
				3	171	43	-	-	-	171	174	0.0	0.0	0.335	A
				4	444	111	-	-	-	444	442	0.0	0.0	0.124	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	331	83	1190	1189	0.278	332	329	0.0	0.4	4.081	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	181	45	1190	1189	0.153	182	180	0.0	0.2	4.110	A
				3	455	114	1190	1189	0.383	453	451	0.0	0.9	6.284	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	160	40	760	475	0.336	162	162	0.7	0.8	19.697	C
				3	0.83	0.21	143	91	0.009	0.71	0.91	0.0	0.0	18.402	C
				4	197	49	760	474	0.415	198	191	0.5	0.9	15.783	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	292	73	760	476	0.613	292	290	0.7	1.4	15.000	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	159	40	-	-	-	160	162	0.0	0.2	4.315	A
				3	0.83	0.21	-	-	-	0.83	0.99	0.0	0.0	5.400	A
				4	488	122	-	-	-	489	485	0.0	0.4	3.168	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	209	52	1079	757	0.276	211	213	0.4	0.4	9.289	A
				4	220	55	1079	759	0.290	221	219	0.4	0.4	6.903	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.36	320	227	0.006	2	2	0.0	0.0	10.277	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	314	78	1079	759	0.413	314	317	0.5	0.6	6.920	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.36	-	-	-	1	2	0.0	0.0	0.000	A
				3	209	52	-	-	-	209	213	0.0	0.0	0.550	A
				4	534	133	-	-	-	534	536	0.0	0.0	0.320	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	414	103	1190	1189	0.348	414	413	0.4	0.5	4.375	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	189	47	1190	1189	0.159	189	190	0.2	0.3	4.329	A
				3	538	135	1190	1189	0.453	535	534	0.9	1.4	7.648	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	193	48	760	415	0.465	194	184	0.8	1.8	30.718	D
				3	0.48	0.12	98	54	0.009	0.71	0.75	0.0	0.0	21.185	C
				4	197	49	760	415	0.474	196	203	0.9	1.6	27.336	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	343	86	760	416	0.825	339	337	1.4	2.7	24.602	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	207	52	-	-	-	193	188	0.2	3.8	43.602	E
				3	0.71	0.18	-	-	-	0.48	0.67	0.0	0.0	33.329	D
				4	571	143	-	-	-	540	548	0.4	9.7	39.141	E
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	272	68	1079	705	0.386	268	260	0.4	1.1	12.747	B
				4	246	62	1079	707	0.348	247	250	0.4	0.8	9.851	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	3	0.65	470	306	0.009	3	3	0.0	0.0	10.924	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	403	101	1079	705	0.572	403	396	0.6	1.3	9.387	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	3	0.68	-	-	-	3	3	0.0	0.0	2.700	A
				3	272	68	-	-	-	272	262	0.0	0.3	3.008	A
				4	651	163	-	-	-	650	649	0.0	0.6	2.222	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	517	129	1190	1189	0.435	516	531	0.5	0.9	5.224	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	199	50	1190	1189	0.167	200	210	0.3	0.3	5.094	A
				3	664	166	1190	1189	0.559	663	664	1.4	2.0	10.025	B
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	185	46	760	411	0.451	188	190	1.8	1.7	32.330	D
				3	1	0.36	166	88	0.016	1	0.99	0.0	0.0	36.301	E
				4	224	56	760	413	0.542	222	214	1.6	2.1	31.491	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	356	89	760	412	0.864	356	349	2.7	3.0	28.150	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	194	48	-	-	-	185	189	3.8	6.3	100.491	F
				3	1	0.33	-	-	-	1	1	0.0	0.0	134.340	F
				4	607	152	-	-	-	580	565	9.7	17.9	96.526	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	259	65	1079	693	0.374	260	257	1.1	0.9	13.604	B
				4	253	63	1079	695	0.364	255	257	0.8	0.9	10.585	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.45	449	295	0.006	2	2	0.0	0.0	12.628	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	418	105	1079	694	0.603	418	410	1.3	1.2	10.149	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.45	-	-	-	2	2	0.0	0.0	1.131	A
				3	258	65	-	-	-	259	257	0.3	0.1	2.940	A
				4	669	167	-	-	-	671	667	0.6	0.2	2.378	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	529	132	1190	1189	0.445	531	543	0.9	0.8	5.417	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	204	51	1190	1189	0.171	204	205	0.3	0.3	5.404	A
				3	665	166	1190	1189	0.559	661	659	2.0	2.0	10.006	B
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	169	42	760	477	0.355	170	184	1.7	1.0	27.111	D
				3	0.59	0.15	151	90	0.007	0.59	0.87	0.0	0.0	22.922	C
				4	190	48	760	476	0.399	191	204	2.1	1.1	24.226	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	310	78	760	477	0.651	314	344	3.0	1.5	21.291	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	160	40	-	-	-	169	181	6.3	0.9	51.899	F
				3	0.83	0.21	-	-	-	0.59	0.75	0.0	0.0	62.132	F
				4	467	117	-	-	-	500	539	17.9	2.2	50.853	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	213	53	1079	755	0.283	215	215	0.9	0.4	10.481	B
				4	210	52	1079	756	0.277	211	217	0.9	0.3	7.781	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.27	352	237	0.005	1	2	0.0	0.0	9.294	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	308	77	1079	754	0.409	311	323	1.2	0.5	7.856	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.27	-	-	-	1	2	0.0	0.0	0.365	A
				3	214	53	-	-	-	213	213	0.1	0.0	0.785	A
				4	518	129	-	-	-	518	536	0.2	0.0	0.505	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	411	103	1190	1190	0.345	412	418	0.8	0.6	4.449	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	186	46	1190	1190	0.156	185	193	0.3	0.2	4.363	A
				3	534	134	1190	1190	0.449	536	539	2.0	1.0	7.783	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	136	34	760	525	0.259	137	140	1.0	0.6	16.534	C
				3	2	0.42	166	112	0.015	2	1	0.0	0.0	21.134	C
				4	168	42	760	525	0.320	169	172	1.1	0.4	12.747	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	245	61	760	525	0.466	249	257	1.5	0.6	11.993	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	136	34	-	-	-	136	138	0.9	0.0	3.473	A
				3	2	0.42	-	-	-	2	1	0.0	0.0	0.918	A
				4	412	103	-	-	-	412	423	2.2	0.0	3.099	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	179	45	1079	813	0.220	178	176	0.4	0.4	7.842	A
				4	185	46	1079	814	0.227	184	196	0.3	0.3	6.136	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.48	406	305	0.006	2	2	0.0	0.0	4.876	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	256	64	1079	812	0.315	256	261	0.5	0.4	6.001	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.48	-	-	-	2	2	0.0	0.0	0.000	A
				3	179	45	-	-	-	179	176	0.0	0.0	0.233	A
				4	440	110	-	-	-	440	457	0.0	0.0	0.112	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	323	81	1190	1189	0.272	322	331	0.6	0.5	4.181	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	183	46	1190	1189	0.154	184	185	0.2	0.2	4.143	A
				3	439	110	1190	1189	0.369	435	442	1.0	0.9	6.552	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

2030 | DM | PM

Data Errors and Warnings

Severity	Area	Item	Description
Info	Simulation	A1 - [Lane Simulation]	This run uses Simulation mode. For detailed information on this mode, please see the User Guide.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	untitled	Standard Roundabout		1, 2, 3, 4	45.86	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	45.86	E

Traffic Demand

Demand Set Details

ID	Year	Scenario	Time period	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2030	DM	PM	ONE HOUR	16:45	18:15	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
1		ONE HOUR	✓	723	100.000
2		ONE HOUR	✓	841	100.000
3					
4		ONE HOUR	✓	1296	100.000

Origin-Destination Data

Demand (PCU/hr)

	To				
	1	2	3	4	
From	1	0	186	1	536
	2	0	2	241	598
	3	0	0	0	0
	4	0	701	595	0

Vehicle Mix

HV data entry mode	PCU Factor for a HV (PCU)
HV Percentages	2.00

Junction	PCU factor for a cyclist	PCU factor for a cyclist in controlling flow
1	0.20	0.80

Heavy Vehicle %

	To				
		1	2	3	4
	1	10	10	10	10
	2	10	10	10	10
	3	10	10	10	10
From	4	10	10	10	10

Cyclist %

	To				
		1	2	3	4
	1	0	0	0	0
	2	0	0	0	0
	3	0	0	0	0
From	4	0	0	0	0

Results

Results Summary for whole modelled period

Arm	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
1	153.69	37.8	F	658	987
2	13.54	3.5	B	773	1159
3					
4	7.60	3.5	A	1202	1803

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	540	135	984	543	533	0	0.0	2.0	12.814	B
2	625	156	844	628	628	682	0.0	0.9	6.816	A
3			0			623				
4	979	245	1	982	974	849	0.0	1.4	5.177	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	653	163	1189	653	655	0	2.0	4.8	23.618	C
2	779	195	1042	769	763	800	0.9	2.5	8.381	A
3			0			772				
4	1182	296	2	1187	1165	1037	1.4	2.0	6.024	A

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	774	193	1422	718	723	0	4.8	22.5	73.916	F
2	935	234	1179	934	932	960	2.5	3.5	12.462	B
3			0			921				
4	1429	357	2	1420	1428	1190	2.0	3.5	7.598	A

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	793	198	1432	746	743	0	22.5	37.8	153.687	F
2	914	229	1217	917	925	961	3.5	3.4	13.542	B
3			0			918				
4	1428	357	3	1429	1433	1214	3.5	2.9	7.455	A

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	647	162	1208	715	758	0	37.8	10.4	98.984	F
2	754	188	1090	751	774	833	3.4	2.3	10.584	B
3			0			776				
4	1205	301	2	1207	1200	1064	2.9	1.9	6.281	A

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Throughput (PCU/hr)	Average throughput (PCU/hr)	Throughput (exit side) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	540	135	984	544	577	0	10.4	1.9	21.052	C
2	628	157	858	633	648	671	2.3	0.9	7.389	A
3			0			643				
4	986	246	0.89	984	994	847	1.9	1.5	5.425	A

Lane Results

Lane Level notation: Lane Level 1 is always closest to the junction.

Lanes: Main Results for each time segment

16:45 - 17:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	306	515	0.595	309	301	0.0	1.1	12.876	B
			2	4	235	515	0.456	234	232	0.0	0.8	11.398	B
		2	1	(2, 3, 4)	540			541	540	0.0	0.1	0.556	A
2	Entry	1	1	3, 4	365	816	0.448	367	367	0.0	0.6	7.027	A
			2	2, 4	260	816	0.318	261	260	0.0	0.4	5.944	A
		2	1	(1, 2, 3, 4)	625			625	631	0.0	0.0	0.237	A
	Exit	1	1		682			682	670	0.0	0.0	0.000	A
3	Exit	1	1		623			623	623	0.0	0.0	0.000	A
4	Entry	1	1	2	354	1189	0.298	355	346	0.0	0.4	4.056	A
			2	2, 3, 4	626	1189	0.526	627	629	0.0	1.0	5.790	A
	Exit	1	1		849			849	842	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	355	464	0.766	356	358	1.1	2.0	19.239	C
			2	4	297	464	0.639	297	297	0.8	1.5	16.140	C
		2	1	(2, 3, 4)	653			652	661	0.1	1.3	5.686	A
2	Entry	1	1	3, 4	446	755	0.591	440	437	0.6	1.5	8.513	A
			2	2, 4	333	755	0.441	330	326	0.4	0.9	7.194	A
		2	1	(1, 2, 3, 4)	779			779	769	0.0	0.1	0.425	A
	Exit	1	1		800			800	798	0.0	0.0	0.000	A
3	Exit	1	1		772			772	756	0.0	0.0	0.000	A
4	Entry	1	1	2	432	1189	0.364	433	427	0.4	0.5	4.525	A
			2	2, 3, 4	750	1189	0.631	754	738	1.0	1.5	6.887	A
	Exit	1	1		1037			1037	1029	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	383	406	0.944	381	385	2.0	3.6	29.892	D
			2	4	339	406	0.834	337	338	1.5	2.6	25.221	D
		2	1	(2, 3, 4)	774			722	734	1.3	16.2	45.794	E
2	Entry	1	1	3, 4	526	712	0.739	525	519	1.5	1.9	11.440	B
			2	2, 4	408	712	0.573	409	413	0.9	1.1	9.405	A
		2	1	(1, 2, 3, 4)	935			934	935	0.1	0.5	1.904	A
	Exit	1	1		960			960	963	0.0	0.0	0.000	A
3	Exit	1	1		921			921	924	0.0	0.0	0.000	A
4	Entry	1	1	2	553	1189	0.465	550	551	0.5	1.1	5.606	A
			2	2, 3, 4	876	1189	0.736	870	876	1.5	2.4	8.853	A
	Exit	1	1		1190			1190	1197	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	390	403	0.966	389	391	3.6	3.8	34.024	D
			2	4	354	403	0.877	356	352	2.6	2.6	28.316	D
		2	1	(2, 3, 4)	793			743	744	16.2	31.4	122.706	F
2	Entry	1	1	3, 4	509	700	0.727	510	514	1.9	1.7	12.088	B
			2	2, 4	406	700	0.580	407	411	1.1	1.0	10.057	B
		2	1	(1, 2, 3, 4)	914			915	924	0.5	0.6	2.365	A
	Exit	1	1		961			961	968	0.0	0.0	0.000	A
3	Exit	1	1		918			918	920	0.0	0.0	0.000	A
4	Entry	1	1	2	550	1189	0.463	550	555	1.1	0.9	5.318	A
			2	2, 3, 4	878	1189	0.738	879	878	2.4	2.0	8.806	A
	Exit	1	1		1214			1214	1214	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	382	459	0.833	386	408	3.8	2.3	25.971	D
			2	4	326	459	0.710	328	350	2.6	1.7	22.154	C
		2	1	(2, 3, 4)	647			708	748	31.4	6.4	75.791	F
2	Entry	1	1	3, 4	433	740	0.586	433	441	1.7	1.2	9.881	A
			2	2, 4	318	740	0.430	318	333	1.0	0.8	8.242	A
		2	1	(1, 2, 3, 4)	754			752	771	0.6	0.3	1.415	A
	Exit	1	1		833			833	840	0.0	0.0	0.000	A
3	Exit	1	1		776			776	779	0.0	0.0	0.000	A
4	Entry	1	1	2	448	1189	0.377	450	443	0.9	0.5	4.693	A
			2	2, 3, 4	757	1189	0.636	757	757	2.0	1.4	7.206	A
	Exit	1	1		1064			1064	1113	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	2, 3, 4	305	515	0.593	305	321	2.3	1.1	15.306	C
			2	4	238	515	0.462	239	256	1.7	0.7	13.377	B
		2	1	(2, 3, 4)	540			543	568	6.4	0.1	7.121	A
2	Entry	1	1	3, 4	372	812	0.458	375	377	1.2	0.6	7.606	A
			2	2, 4	258	812	0.318	258	271	0.8	0.4	6.364	A
		2	1	(1, 2, 3, 4)	628			629	644	0.3	0.0	0.323	A
	Exit	1	1		671			671	680	0.0	0.0	0.000	A
3	Exit	1	1		643			643	652	0.0	0.0	0.000	A
4	Entry	1	1	2	345	1190	0.290	344	349	0.5	0.5	4.153	A
			2	2, 3, 4	641	1190	0.539	639	645	1.4	1.0	6.117	A
	Exit	1	1		847			847	887	0.0	0.0	0.000	A

Lane movements: Main Results for each time segment
16:45 - 17:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	138	34	760	516	0.266	139	135	0.0	0.6	14.785	B
				3	0.59	0.15	81	55	0.011	0.59	0.59	0.0	0.0	15.489	C
				4	168	42	760	517	0.326	168	165	0.0	0.5	11.287	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	235	59	760	515	0.456	234	232	0.0	0.8	11.398	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	137	34	-	-	-	138	138	0.0	0.1	0.903	A
				3	0.59	0.15	-	-	-	0.59	0.59	0.0	0.0	0.348	A
				4	402	101	-	-	-	403	402	0.0	0.1	0.437	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	179	45	1079	815	0.220	181	181	0.0	0.3	8.172	A
				4	186	46	1079	815	0.228	186	186	0.0	0.3	5.906	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.37	354	272	0.005	1	2	0.0	0.0	6.977	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	258	65	1079	815	0.317	260	259	0.0	0.4	5.938	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	1	0.37	-	-	-	1	2	0.0	0.0	0.000	A
				3	179	45	-	-	-	179	182	0.0	0.0	0.338	A
				4	444	111	-	-	-	444	447	0.0	0.0	0.197	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	354	89	1190	1189	0.298	355	346	0.0	0.4	4.056	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	184	46	1190	1189	0.155	186	187	0.0	0.1	4.088	A
				3	442	110	1190	1189	0.371	441	441	0.0	0.9	6.508	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:00 - 17:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	164	41	760	463	0.355	164	168	0.6	1.1	21.534	C
				3	0.69	0.17	112	71	0.010	0.89	0.69	0.0	0.0	21.724	C
				4	190	48	760	465	0.409	191	190	0.5	0.9	17.171	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	297	74	760	463	0.640	297	297	0.8	1.5	16.140	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	164	41	-	-	-	164	170	0.1	0.4	6.764	A
				3	0.69	0.17	-	-	-	0.69	0.69	0.0	0.0	7.434	A
				4	488	122	-	-	-	487	491	0.1	0.9	5.307	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	221	55	1079	754	0.293	218	218	0.3	0.9	9.568	A
				4	225	56	1079	756	0.297	222	219	0.3	0.6	7.446	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.54	380	269	0.008	2	2	0.0	0.0	7.760	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	331	83	1079	754	0.439	327	324	0.4	0.9	7.191	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.54	-	-	-	2	2	0.0	0.0	0.058	A
				3	222	55	-	-	-	221	220	0.0	0.1	0.564	A
				4	555	139	-	-	-	556	547	0.0	0.0	0.370	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	432	108	1190	1189	0.364	433	427	0.4	0.5	4.525	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	199	50	1190	1189	0.167	201	201	0.1	0.1	4.510	A
				3	551	138	1190	1189	0.464	553	537	0.9	1.3	7.773	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:15 - 17:30

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	183	46	760	405	0.452	186	188	1.1	1.8	31.243	D
				3	2	0.44	187	99	0.018	1	1	0.0	0.0	38.827	E
				4	198	49	760	406	0.487	194	195	0.9	1.8	28.537	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	339	85	760	406	0.834	337	338	1.5	2.6	25.221	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	197	49	-	-	-	183	191	0.4	4.4	48.776	E
				3	1	0.37	-	-	-	2	1	0.0	0.0	53.286	F
				4	576	144	-	-	-	537	542	0.9	11.8	44.723	E
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	271	68	1079	712	0.381	272	267	0.9	1.1	12.967	B
				4	255	64	1079	713	0.357	253	252	0.6	0.8	9.822	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.39	354	237	0.007	2	2	0.0	0.0	10.818	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	407	102	1079	713	0.570	407	411	0.9	1.1	9.399	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.39	-	-	-	2	2	0.0	0.0	1.760	A
				3	272	68	-	-	-	271	268	0.1	0.2	2.276	A
				4	662	165	-	-	-	661	665	0.0	0.3	1.754	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	553	138	1190	1189	0.465	550	551	0.5	1.1	5.606	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	224	56	1190	1189	0.188	222	221	0.1	0.4	5.499	A
				3	652	163	1190	1189	0.548	647	655	1.3	2.0	9.978	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:30 - 17:45

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	188	47	760	402	0.468	188	189	1.8	1.8	34.601	D
				3	1	0.32	199	105	0.012	1	1	0.0	0.0	32.193	D
				4	200	50	760	404	0.494	199	201	1.8	2.0	33.491	D
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	354	88	760	403	0.878	356	352	2.6	2.6	28.316	D
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	208	52	-	-	-	188	189	4.4	8.5	126.090	F
				3	1	0.34	-	-	-	1	1	0.0	0.1	156.080	F
				4	584	146	-	-	-	554	553	11.8	22.8	121.457	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	257	64	1079	699	0.368	257	262	1.1	1.1	13.564	B
				4	252	63	1079	700	0.359	253	252	0.8	0.7	10.552	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	3	0.66	407	262	0.010	3	2	0.0	0.0	12.653	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	403	101	1079	701	0.575	405	410	1.1	1.0	10.044	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	3	0.71	-	-	-	3	2	0.0	0.0	3.701	A
				3	256	64	-	-	-	257	262	0.2	0.2	2.799	A
				4	655	164	-	-	-	655	660	0.3	0.4	2.189	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	550	138	1190	1189	0.463	550	555	1.1	0.9	5.318	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	221	55	1190	1189	0.186	220	222	0.4	0.4	5.475	A
				3	657	164	1190	1189	0.553	659	656	2.0	1.5	9.933	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

17:45 - 18:00

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	178	44	760	460	0.386	178	194	1.8	1.3	27.261	D
				3	0.79	0.20	143	85	0.009	0.89	0.98	0.0	0.0	27.769	D
				4	204	51	760	461	0.443	208	213	2.0	1.0	24.773	C
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	326	81	760	459	0.710	328	350	2.6	1.7	22.154	C
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	165	41	-	-	-	178	191	8.5	1.8	78.373	F
				3	0.49	0.12	-	-	-	0.79	0.95	0.1	0.0	96.182	F
				4	481	120	-	-	-	530	556	22.8	4.6	74.877	F
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	220	55	1079	740	0.297	221	222	1.1	0.5	11.415	B
				4	214	53	1079	741	0.289	211	219	0.7	0.6	8.337	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.39	327	223	0.007	2	2	0.0	0.0	8.656	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	317	79	1079	740	0.428	317	332	1.0	0.8	8.240	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	2	0.42	-	-	-	2	2	0.0	0.0	1.906	A
				3	220	55	-	-	-	220	220	0.2	0.1	1.783	A
				4	532	133	-	-	-	530	549	0.4	0.2	1.266	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	448	112	1190	1189	0.377	450	443	0.9	0.5	4.693	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	204	51	1190	1189	0.171	204	201	0.4	0.3	4.588	A
				3	553	138	1190	1189	0.465	554	555	1.5	1.1	8.164	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A

18:00 - 18:15

Arm	Side	Lane level	Lane	To Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Simulation max flow (PCU/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Average throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	142	36	760	515	0.276	141	148	1.3	0.7	17.193	C
				3	0.98	0.25	168	112	0.009	0.98	1	0.0	0.0	12.626	B
				4	162	40	760	516	0.314	163	173	1.0	0.5	13.722	B
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	238	60	760	516	0.461	239	256	1.7	0.7	13.377	B
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	142	36	-	-	-	142	145	1.8	0.0	7.847	A
				3	0.98	0.25	-	-	-	0.98	1	0.0	0.0	1.435	A
				4	397	99	-	-	-	400	422	4.6	0.0	6.886	A
2	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				3	186	46	1079	812	0.229	188	189	0.5	0.3	8.761	A
				4	186	46	1079	812	0.229	187	188	0.6	0.3	6.455	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0.79	0.20	230	168	0.005	0.89	1	0.0	0.0	11.634	B
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	257	64	1079	812	0.317	257	270	0.8	0.4	6.341	A
		2	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				2	0.79	0.20	-	-	-	0.79	1	0.0	0.0	0.268	A
				3	185	46	-	-	-	186	188	0.1	0.0	0.454	A
				4	443	111	-	-	-	443	455	0.2	0.0	0.269	A
4	Entry	1	1	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	345	86	1190	1190	0.290	344	349	0.5	0.5	4.153	A
				3	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A
			2	1	0	0	0	0	0.000	0	0	0.0	0.0	0.000	
				2	184	46	1190	1190	0.155	186	182	0.3	0.1	4.256	A
				3	457	114	1190	1190	0.384	454	463	1.1	0.9	6.853	A
				4	0	0	0	0	0.000	0	0	0.0	0.0	0.000	A