1.0 INTRODUCTION

1.1 David Tucker Associates (DTA) has been commissioned by Taylor Wimpey to provide transportation advice on the viability and delivery of the proposed residential development of up to 195 dwellings on land north of Barkby Road, Syston. A Transport Assessment (DTA reference 20060-08b has been produced that has assessed the potential implications.

1.2 As part of the application process, Leicestershire County Council (LCC) as Local Highway Authority has reviewed the TA and have made a number of comments. The purpose of this note is to provide response to the following

- Site Access and Interaction with HA1
- Accessibility and Public Transport
- Trip Generation; and
- Traffic Base Flows and Junction Capacity Assessments.

1.3 The response note in full is contained within **Appendix A** of this note and should be read in conjunction with this note. For ease, a summary of LCC's comments are set out in *blue italics,* with DTA's response set out in black.

1.4 These clarifications confirm and support the findings of the original Transport Assessment.

2.0 LCC COMMENT & DTA RESPONSE

Site Access Proposals and interaction with Proposed Allocation HA1

2.1 ***LCC Comment****: The County Council request that the site access visibility splays be reviewed on the basis of a more up to date speed survey.*

2.2 **DTA Response**: It has been confirmed in correspondence that the survey obtained in June 2021 is acceptable for this purpose. The survey is attached at **Appendix B** and confirms the 85th percentile speeds to be 42.9mph eastbound and 39.9mph westbound. In Manual for Streets terms, this confirms a splay of 66m to the right and 59m to the left.

2.3 As shown on drawing **20060-02 Rev C (Appendix C)**, splays of 120m to the right and 75m to the left are available. In practice, visibility to the left exceeds 100m (to the junction with

Queniborough Road) and there are no constraints to achieving the appropriate splays.

2.4 It is noted that the swept path analysis assessment and RSA Stage 1 submitted with the TA has been accepted by LCC. Therefore, no further amendments are proposed or required.

2.5 In terms of interaction with potential access to the southern parcel of land (proposed allocation HA1-Land southeast of Syston), the promotors are the same (Taylor Wimpey). Given that this site is expected to proceed ahead of HA1, an independent access has been designed to ensure delivery. However, this has been designed to be capable of being upgraded to a roundabout in the future to serve both the northern and southern parcels. The indicative arrange of this is shown on **Drawing 19407-02** (**Appendix C**).

2.6 It is envisaged that the roundabout would be considered subsequently when the application for HA1 is under future consideration. However, it may be appropriate to allow either access to be constructed (secured through a planning condition) if timescales of HA1 delivery align with that for the current application. The applicant is supportive of this approach.

Accessibility

2.7 ***LCC Comment:*** *The LHA would require that the Applicant should to explore/develop options for a flexible form of transport provision, which whilst not necessarily adhering to the minimum hourly frequency, does cover the whole of the day 7-7pm (Monday-Friday) and 8-6pm Saturday. It could take the form of a demand based model. The Applicant should explore options and then submit proposals to the LHA for approval, after which they would then go and secure the service/provision.*

2.8 **DTA Response:** Clarification has been sought from LCC as to what is required in this respect. The applicant is willing to fund and deliver accessibility improvements in the form of improved bus services and welcomes the flexibility proposed by LCC in respect of potential demand responsive options for provision.

2.9 Clearly as a result of the overall allocations proposed within Syston, there is scope to provide an enhanced and regular bus service to the eastern side of Syston. Discussions have been held with Arriva who have confirmed in principle that an early phase of this strategy would be to extend the Service 6 into Syston, along Goodes Lane to then U-turn at the Saxby Drive / Barkby Lane junction. This could comprise a twice hourly service for the addition of one extra

vehicle.

2.10 Alternatively, options for a local *"Arriva Click"* type service within Syston could be provided. However, at present Arriva are not able to commit to a form of that service and therefore whilst the promotor continue to have those discussions, it cannot be fixed now.

2.11 It is therefore proposed that the condition which secures the provision of service and / or some reasonable alternative be placed on the consent. The following proposed by LCC as part of the previous application reflects an appropriate form of words.

> *"Provision of an hourly bus service or other flexible transport provision serving the development site and the centre of Syston as agreed with the Local Planning Authority. The bus services shall be scheduled to operate every hour between the hours of 7:00 - 19:00 Monday – Friday and 08:00 - 18:00 on Saturdays. The bus service or alternative provision shall be in operation at 25% occupation of the development, unless an alternative date is agreed to in writing by the Local Planning Authority, and until five years following 50% occupation. All details of the bus service or alternative provision and any amendments are to be submitted to and approved in writing by the Local Planning Authority. The bus service may be secured through area-wide initiatives provided that the minimum service level provision is met."*

Trip Generation

2.12 ***LCC Comment:*** *"…the LHA still consider these trip rates to be low. The LHA would therefore request for the TRICS analysis to be re-run with revised trip rates and applying the journey to work census mode share data to the person trips. The Applicant should then consider which trip generation assessment is more robust and these revised trip rates and trip generation should then submitted to the LHA for review.*

2.13 **DTA Response**: DTA has considered three methods for estimating the predicted traffic associated with the proposals. Firstly, TRICS was interrogated to establish vehicular trip rates. As an alternative assessment, TRICS was again interrogated for person trip rates, mode share for car drivers in the local area recorded in the 2011 census applied to the person trip rates. The final method derived a local trip rate based on the ATC placed at the junction of St Paul's Drive (accessed from Goodes Lane, Syston) with this ATC capturing the trip movements in the local area.

2.14 All three sets of trip rates were compared and the highest set (AM census derived, PM locally

derived) for each peak period was selected. The trip rates selected, and subsequent trips are presented below.

Table 1: DTA Derived Trip rates and generations- 195 Dwellings

Housing- 195 Units	AM Peak			PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
Trip Rate	0.132	0.387	0.520	0.418	0.215	0.633
Trip Generation	26	75	102	82	42	123

2.15 The above rates are higher than the trip rates proposed for proposed allocation HA2 (Barky Road, application reference P/22/0354) which were based on an updated person trip assessment (See **Appendix D**) and forecast trip rates of 0.519 and 0.567 in the AM and PM Peak.

2.16 However, in light of LCC's comments above, DTA has reviewed trip rates previously provided by LCC for a proposed development at Oadby Grange, Oadby. Within their correspondence, LCC stated that the rates were comparable with the 'Land at Cottage Farm, Phase II' Transport Assessment; the scope of which is understood to have been agreed with the Highway Authority.

2.17 The trip rates previously received from LLC are presented below.

Table 2: LCC Vehicular Trip Rates

Housing - Private	AM Peak			PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
Trip Rate	0.253	0.503	0.756	0.466	0.283	0.749

2.18 Given that the above trip rates are significantly higher than those presented within the TA, for robustness, these are adopted here as a sensitivity test.

2.19 Based upon the above trip rates, the proposed development would generate the following traffic in the peak hours.

Table 3: Traffic Generation- 195 Units

Housing - Private	AM Peak			PM Peak		
	Arrival	Dep	Total	Arrival	Dep	Total
Trip Rate	49	98	147	91	55	146

2.20 The above shows that a total of 195 dwellings is predicted to generate around 150 two way vehicle movements in the peak period. Across the peak, this equates to broadly three vehicles every minute.

2.21 When compared to the trips within Table 1, the higher trip rate generates an additional 45 two way vehicle movements in the AM peak and 23 two way vehicle movements in the PM peak. Spread across the peak, this would be the equivalent of 1-2 additional vehicles per minute.

Traffic Base Flows and Junction Capacity Assessments.

2.22 ***LCC Comment:*** *"Classified Turning Counts (CTC) and queue length surveys… were carried out at the following junctions:*

- *High Street/Melton Road/Barkby Road;*
- *Barkby Road/ Queniborough Road;*
- *Goodes Lane/ St Pauls' Drive;*
- *Barkby Road/ Pembroke Avenue; and*
- *Goodes Lane/ Melton Road*

2.23 These surveys were carried out on 1st February 2018 during the hours of 07:00-10:00 and 16:00- 19:00 and recorded direction, volume and classification of traffic. Notwithstanding the above, the LHA would request for new surveys to be carried out the junctions listed above as the data is more than three years old. Covid adjustment factors should be applied to the flows and these can be obtained from the NDI team.

2.24 Once these surveys have been undertaken, the LHA would request for the junction capacity assessments to be re-run Assessments are also required include Fosse Way/ High Street and Barkby Road/ Pembroke Avenue junctions. The results should be submitted to the LHA for review, including the ARCADY and PICADY modelling files. The 2022 base flows should be factored up to a future year of 2027, with the TEMPro growth factors to also be revised. The LHA are aware of a number of committed developments within the vicinity of this application

site and their traffic flows on the local network would have an effect. The Applicant should therefore contact Charnwood Borough Council for a definitive list and include these in their assessment.

2.25 DTA Response: A sensitivity test has been carried out using updated traffic counts. These include three junctions counted in 2021 (extracted from TA supporting allocated site HA2 application) and in June 2022 (commissioned by DTA and undertaken by LCC) survey data to examine the impact of the development.

2.26 Review of those surveys shows the 2021 / 2022 counts are comparable with the previous 2019 surveys. No further calibration or application of 'Covid' factors is therefore considered reasonable.

2.27 The 2021 and 2022 base flows have been factored up to a future year assessment of 2027 using rates obtained from TEMPro for the MSOA in which the junctions sit. The TEMPro factors include all known committed development not captured by the recently collected traffic count data. The resulting growth factors are shown below.

Table 4: TEMPro Growth Factors

Years	AM Growth Figure	PM Growth Figure
2021-2027	1.0516	1.0516
2022-2027	1.0426	1.0426

2.28 To establish if the 2021/2022 traffic survey data used within the sensitivity test is appropriate for use, DTA has compared the data to the 2018 traffic survey data that was used within the TA. The overriding objective of the exercise is to establish how peak hour traffic flows have changed between 2018 and 2021/2022. If overall traffic levels have fallen or remained constant, it is reasonable to conclude that the data on which the sensitivity is based is robust and appropriate for use.

2.29 A comparison of the historic and most recent data at the Barkby Road / Pembury Road and Barkby Road/ Melton Road/ High St junctions is presented below.

Barkby Road/ Pembroke Avenue

Comarison (All vehicles) 2018-2022

2018 AM	Barkby Road S	Pembroke Avenu	Barkby Road N
Barkby Road S	0	122	215
Pembroke Avenu	98	0	47
Barkby Road N	189	47	0

2022 AM	Barkby Road S	Pembroke Avenu	Barkby Road N
Barkby Road S	0	148	211
Pembroke Avenu	62	0	33
Barkby Road N	144	57	0

2018 PM LGV	Barkby Road S	Pembroke Avenu	Barkby Road N
Barkby Road S	0	80	183
Pembroke Avenu	109	0	47
Barkby Road N	205	48	0

2022 PM	Barkby Road S	Pembroke Avenu	Barkby Road N
Barkby Road S	0	59	226
Pembroke Avenu	121	0	29
Barkby Road N	201	46	0

Difference	Barkby Road S	Pembroke Avenu	Barkby Road N	Total
Barkby Road S	0	26	-4	22
Pembroke Avenu	-36	0	-14	-50
Barkby Road N	-45	10	0	-35
Total	-81	36	-18	-63

Difference	Barkby Road S	Pembroke Avenu	Barkby Road N	Total
Barkby Road S	0	-21	43	22
Pembroke Avenu	12	0	-18	-6
Barkby Road N	-4	-2	0	-6
Total	8	-23	25	10

Barkby Rd / Melton Rd/ High St

Comparison (All Vehicles)- 2018-2022

2018 AM	Melton Road N	Barkby Road	Melton Road S	High Street
Melton Road N	0	89	288	171
Barkby Road	103	0	85	180
Melton Road S	223	35	0	80
High Street	207	95	75	2

2022 AM	Melton Road N	Barkby Road	Melton Road S	High Street
Melton Road N	1	79	350	141
Barkby Road	64	0	79	130
Melton Road S	290	35	2	72
High Street	182	87	99	1

2018 PM	Melton Road N	Barkby Road	Melton Road S	High Street
Melton Road N	2	95	244	177
Barkby Road	72	3	101	115
Melton Road S	292	66	0	90
High Street	271	167	85	0

2022 PM	Melton Road N	Barkby Road	Melton Road S	High Street
Melton Road N	0	97	292	156
Barkby Road	69	1	80	112
Melton Road S	328	77	3	89
High Street	273	157	71	0

Difference	Melton Road N	Barkby Road	Melton Road S	High Street	Total
Melton Road N	1	-10	62	-30	23
Barkby Road	-39	0	-6	-50	-95
Melton Road S	67	0	2	-8	61
High Street	-25	-8	24	-1	-10
Total	4	-18	82	-89	-21

Difference	Melton Road N	Barkby Road	Melton Road S	High Street	Total
Melton Road N	-2	2	48	-21	27
Barkby Road	-3	-2	-21	-3	-29
Melton Road S	36	11	3	-1	49
High Street	2	-10	-14	0	-22
Total	33	1	16	-25	25

2.30 The tables indicate that peak hour traffic has decreased at both junctions in the AM between 2018 and 2022 and remains similar in the PM peak. This reinforces the robustness of the 2021/2022 surveyed flows and junction capacity assessments presented within this note and the application of a COVID adjustment factor would not be required.

2.31 The assessment results are summarised below, and the full assessment outputs are contained

within **Appendix E**.

Junction 1: High Street/Melton Road/Barkby Road

	AM			PM		
	Q (PCU)	Delay (s)	RFC	Q (PCU)	Delay (s)	RFC
	2022					
1 - Melton Road N	1.5	8.38	0.59	1.5	8.77	0.59
2 - Barkby Road	1.1	19.24	0.53	2.1	27.17	0.69
3 - Melton Road S	1.3	10.39	0.55	2.1	13.73	0.67
4 - High Street	1.1	9.59	0.52	2.9	19.36	0.74
	2027					
1 - Melton Road N	1.6	9.04	0.62	1.7	9.57	0.62
2 - Barkby Road	1.3	21.62	0.57	2.6	32.47	0.73
3 - Melton Road S	1.5	11.17	0.58	2.4	15.34	0.70
4 - High Street	1.2	10.34	0.55	3.7	23.52	0.79
	2027 + Development					
1 - Melton Road N	1.7	9.24	0.62	**1.7**	**10.10**	**0.63**
2 - Barkby Road	1.7	24.86	0.64	**3.3**	**39.12**	**0.78**
3 - Melton Road S	1.5	11.61	0.59	**2.5**	**15.96**	**0.71**
4 - High Street	1.3	10.82	0.57	**4.7**	**28.90**	**0.83**

2.32 The results show that the junction currently operates within capacity and will continue to operate within capacity in the future year scenario following the inclusion of the development.

Junction 2: Barkby Road/ Queniborough Road

Arm	AM Peak		PM Peak	
	DoS (%)	Queue	DoS (%)	Queue
2021 Base				
Queniborough Road South	63.4	9	52.7	9
Barkby Road West	64.6	7	53.1	5
Queniborough Road North	64.3	11	51.7	7
Barkby Road West	2.6	0	6.9	0
2027				
Queniborough Road South	66.9	10	55.5	9
Barkby Road West	68.0	8	53.2	5
Queniborough Road North	67.6	12	55.8	8
Barkby Road West	2.6	0	6.9	0
2027 + Development				
Queniborough Road South	73.2	11	59.1	10
Barkby Road West	70.8	9	60.4	6
Queniborough Road North	71.6	12	58.7	8
Barkby Road West	2.6	0	6.9	0

2.33 The results indicate that the junction operates with reserve capacity in all scenarios., with the

proposed development having a negligible impact on the performance of the junction.

Junction 3: Goodes Lane/ St Pauls' Drive

2.34 The Goodes Lane / St Pauls' Drive was not assessed within the previous versions of the TA. A desktop review of the layout indicated St Pauls Drive is a cul-de-sac serving circa 85 dwellings. The development trip assignment, as shown on Figure 2 of the TA indicates that no development trips are forecast to travel to/from St Pauls Drive, with all development traffic expected to travel along Goodes Lane. This amounts to 39 two way trips in both peak periods. On this basis no further assessment has been considered.

Junction 4: Barkby Road/ Pembroke Avenue

	AM			PM		
	Q (PCU)	Delay (s)	RFC	Q (PCU)	Delay (s)	RFC
	2022					
Stream B-C	0.1	6.65	0.06	0.1	7.29	0.06
Stream B-A	0.2	10.13	0.17	0.4	11.96	0.31
Stream C-AB	0.2	6.36	0.13	0.2	5.65	0.10
	2027					
Stream B-C	0.1	6.73	0.07	0.1	7.42	0.06
Stream B-A	0.2	10.36	0.18	0.5	12.42	0.32
Stream C-AB	0.2	6.39	0.14	0.2	5.66	0.11
	2027 + Dev					
Stream B-C	0.1	7.07	0.07	**0.1**	**7.97**	**0.07**
Stream B-A	0.3	11.24	0.22	**0.6**	**14.23**	**0.40**
Stream C-AB	0.2	6.44	0.14	**0.2**	**5.57**	**0.11**

2.35 The results indicate the junction is operating well within practical capacity and will continue to operate satisfactorily, even with the inclusion of the development.

Junction 5: Goodes Lane/ Melton Road

	AM			PM		
	Q (PCU)	Delay (s)	RFC	Q (PCU)	Delay (s)	RFC
	2022					
Stream B-C	1.8	19.78	0.64	0.4	9.93	0.29
Stream B-A	0.2	19.08	0.17	0.1	16.76	0.08
Stream C-AB	1.1	7.50	0.39	5.3	19.67	0.77
	2027					
Stream B-C	2.1	22.59	0.68	**0.4**	**10.33**	**0.31**
Stream B-A	0.3	21.92	0.20	**0.1**	**18.14**	**0.09**
Stream C-AB	1.3	7.79	0.42	**7.4**	**26.32**	**0.83**
	2027 + Development					
Stream B-C	2.8	27.59	0.74	0.5	10.88	0.34
Stream B-A	0.3	26.44	0.23	0.1	19.58	0.10
Stream C-AB	1.5	8.38	0.46	13.0	47.79	0.92

2.36 The results show the junction operates within its theoretical capacity in a future year of 2027. A review of the trip generation and assignment shows that the development impact is an additional 39 two way flows in each peak. This is broadly 1-2 additional vehicles per minute through the junction during the peak hours. This level of increase in considered negligible.

Junction 6: Fosse Way/ High Street

Arm	AM Peak		PM Peak	
	DoS (%)	Queue	DoS (%)	Queue
2021 Base				
Fosse Way North	62.1	10	37.6	7
High Street	69.7	13	76.6	17
Fosse Way South	69.5	15	75.8	16
2027				
Fosse Way North	66.8	11	48.3	9
High Street	70.7	14	80.0	18
Fosse Way South	71.6	16	80.5	18
2027 + Development				
Fosse Way North	76.6	12	41.9	8
High Street	75.6	15	84.0	19
Fosse Way South	77.1	18	83.9	20

2.37 The results indicate the junction is operating within practical spare capacity in 2027, with the addition of development traffic resulting in an increase of a maximum of 2 PCU through the junction during the peak periods.

Junction 7: Queniborough Road/ Barkby Road/ Rearsby Road/ Syston Road

2.38 Development traffic flows through this junction are forecast to amount to 10 two-way trips in the peak periods. This equates to one additional vehicle every 6 minutes on the network. The Department for Transport's publication entitled "Guidance on Transport Assessment" (GTA) 2007 suggests that formal assessment of a junction may not be required for developments which would typically generate fewer than 30 two-way additional trips.

2.39 The 10 trips in each peak are below the 30 two way trip threshold and therefore, no further assessment is deemed necessary.

Appendix A

LCC Formal Response

Substantive response of the Local Highway Authority to a planning consultation received under The Development Management Order.

Leicestershire County Council

Response provided under the delegated authority of the Director of Environment & Transport**.**

APPLICATION DETAILS:

Planning Application Number: P/21/2639/2

Highway Reference Number: 2021/2639/02/H/R1

Application Address: Land North of Barkby Road Syston Leicestershire

Application Type: Outline (with access)

Description of Application:

Re-consultation. Outline application for up to 195 dwellings with all matters reserved except access.

GENERAL DETAILS

Planning Case Officer: Louise Winson

Applicant: Taylor Wimpey (UK) Ltd

County Councillor: Mr Tom Barkley

Parish: Syston

Road Classification: Class C

Substantive Response provided in accordance with article 22(5) of The Town and Country Planning (Development Management Procedure) (England) Order 2015:

The Local Highway Authority does not consider that the application as submitted fully assesses the highway impact of the proposed development and further information is required as set out in this response. Without this information the Local Highway Authority is unable to provide final highway advice on this application. Under the current Covid-19 situation we would ask that any such work is carried out in accordance with the latest Government guidance.

Advice to Local Planning Authority

Background

The Local Highway Authority (LHA) has been consulted on an outline with access planning application for up to 195 dwellings to be located on land north of Barkby Road, Syston.

The LHA provided an initial holding response on 18th March 2022 as, given the scale of development and due to the volume and complexity of technical evidence submitted, the the LHA required more time to provide formal comments.

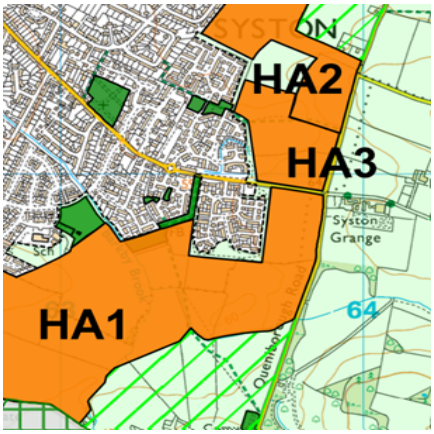
The LHA understand that a previous application for the same quantum of development was submitted in 2018 (Ref: P/18/1366/2). The application was subsequently withdrawn, however the LHA did not advise of an objection.

These highway comments are in response to the following documents which have been submitted via Charnwood Borough Council's planning website.

- Transport Assessment (TA) prepared by David Tucker Associates, dated 30th November 2021;
- Travel Plan prepared by David Tucker Associates, dated 23rd September 2021;
- Location Plan, drawing no. DRG: P20-3155 001;
- Proposed Site Access, drawing no. 20060-02 Rev C; and
- Concept Masterplan, drawing no. DRG: P20-3155 003 Rev F

The LHA note that the application site is site HA3 in the LPA's draft local plan, which is shortly to undergo the EIP stage. As shown in the extract from the LPA's draft local plan proposals map below (not to scale), site HA3 is opposite or adjacent to sites HA1 and HA2.

Whilst the LHA has reviewed the proposed site access below, it is concerned that the development proposals may not have been considered in light of emerging local plan sites HA1 and HA2. For example, could the proposed site access for HA3 have an adverse effect on any potential access strategy for site HA1? The LHA would consider it advisable that this considered at this stage, and would welcome the LPA's view on this matter.



Site Access

Barkby Road is a C classified road, subject to a 40mph speed limit in the vicinity of the site access.

Notwithstanding the LHA's comments with respect to the emerging local plan above, the LHA note that the site is proposed to be accessed via a new priority junction off Barkby Road, Syston, with a ghost right turn lane into the site . As shown on David Tucker drawing number 20060-02 Rev C, a 5.5m width is demonstrated with visibility spays of 2.4m by 75m to the east along Barkby Road and 2.4m by 120m to the west along Barkby Road. The visibility splays have been based on 85th percentile recorded speeds which have been obtained from an ATC survey between the 31/02/2018 – 06/02/2018.

Notwithstanding the above, as the recorded data is more than 3 years old, the LHA would request for a new speed survey to be undertaken at the point of the site access. The Applicant can commission the Network Data and Intelligence team at the LHA to undertake a survey on their behalf should they wish to do so. They can be contacted at ndi@leics.gov.uk. The Applicant is also required to contact the NDI team with respective to obtaining a Section 50 permit in advance of a survey being undertaken.

Vehicle swept path analysis has been provided (DTA drawing no. 20060-02b-1 which demonstrates that the access junction can cater satisfactorily for the swept paths of a large refuse vehicle for all movements. The LHA notes whilst the refuse wagon does encroach onto opposite carriageways, it should be noted that these movements will be infrequent and occur outside of the peak hour periods.

A Stage 1 Road Safety Audit (RSA1), prepared by Mott MacDonald dated 11 October 2018, has been submitted with the TA. The RSA1 did not raise any issues. As there have been no changes to the highway network in the vicinity of the site and there have been no PICs at the location of the site access, the LHA consider the 2018 RSA1 to be acceptable.

Highway Safety

Personal Injury Collision (PIC) data has been obtained from Leicestershire County Council for the most recent five-year period from 01/01/2016 to 28/02/2021.

A total of 18 PICs have been recorded over the most recent 5-year period of which 12 were classed as 'slight' in severity and six classed as 'serious' in severity.

Having reviewed the submitted PIC data, the LHA note on their records that an additional PIC occurred on 16/09/2021 on Queniborough Road and was recorded as 'serious'.
Notwithstanding the above, having reviewed the data, the LHA does not consider there any patterns of PICs which could be exacerbated by the development proposals.

Trip Generation

The Applicant has calculated the predicted vehicular and person trips likely to be generated by the site using the TRICS database and has provided the trip rates shown in Table 6 and associated trip generation in Table 7 below which has been extracted from the TA.

Table 6 – Vehicle and person TRICS trip rates per dwelling

	Vehicle Trips			Person Trips		
	Arrivals	Departur	Total	Arrivals	Departur	Total
08:00-09:00	0.155	0.309	0.464	0.185	0.541	0.726
17:00-18:00	0.288	0.15	0.438	0.412	0.206	0.618
Daily	2.04	2.227	4.267	2.978	3.15	6.128

Table 7 – Vehicle and person generation per 195 dwellings

	Vehicle Trips			Person Trips		
	Arrivals	Departur	Total	Arrivals	Departur	Total
08:00-09:00	30	60	90	36	105	142
17:00-18:00	56	29	85	80	40	121
Daily	398	434	832	581	614	1195

Table 7 demonstrates that the proposed development is predicted to generate 90 two-way vehicle movements in the AM peak and 85 in the PM peak. This would appear low, however as an alternative assessment, the mode share for car drivers in the local area recorded in the 2011 census (71.6%) has been applied to the person trip rates shown in Table 7.

The results of this are summarised in Table 8 below which has been extracted from the TA and compared with the TRICS results.

Table 8 – Census derived traffic generation

	TRICS			Census		
	Arrivals	Departur	Total	Arrivals	Departur	Total
08:00-09:00	30	60	90	26	75	102
17:00-18:00	56	29	85	57	29	87
Daily	398	434	832	416	440	856

Table 8 shows that by applying the journey to work mode share data to the person trips, and comparing the results to those derived from TRICS, the trip generation is slightly higher but comparable.

The Applicant also undertook a traffic count on 1st February 2018, which is more than 3 years old at the junction of St Paul's Drive (accessed from Goodes Lane, Syston) to derive a local trip rate for the area, resulting in the trip rates shown in Table 9 which has been extracted from the TA.

Table 9 – Local derived traffic generation (195 dwellings)

	Derived Trip Rate			Trip Generation		
	Arrivals	Departur	Total	Arrivals	Departur	Total
08:00-09:00	0.127	0.215	0.342	25	42	67
17:00-18:00	0.418	0.215	0.633	82	42	123

The Applicant then compared all three sets of trip generation figures and selected the highest set for each peak period, resulting in the trip generation figures shown in Table 10 below which has been extracted from the TA.

Table 10 – Trip Generation Used in the Assessment

	Trip Generation		
	Arrivals	Departur	Total
08:00-09:00	26	75	102
17:00-18:00	82	42	123

Table 10 demonstrates that the proposed development is predicted to generate 102 two-way vehicle movements in the AM peak and 123 in the PM peak. Notwithstanding, the LHA still consider these trip rates to be low. The LHA would therefore request for the TRICS analysis to be re-run with revised trip rates and applying the journey to work census mode share data to the person trips. The Applicant should then consider which trip generation assessment is more robust and these revised trip rates and trip generation should then submitted to the LHA for review.

The development trips have been assigned to the wider surrounding highway network on the basis of information extracted from the 2011 census using the Charnwood 018 Middle Super Output Area (MSOA). The LHA accepts the trip distribution outlined within the TA.

Traffic Base Flows and Junction Capacity Assessments.

Classified Turning Counts (CTC) and queue length surveys were also carried out at a number of local junctions on the road network to inform the assessment. The counts were carried out at the following junctions:

- High Street/Melton Road/Barkby Road;
- Barkby Road/ Queniborough Road;
- Goodes Lane/ St Pauls' Drive;
- Barkby Road/ Pembroke Avenue; and
- Goodes Lane/ Melton Road

These surveys were carried out on 1st February 2018 during the hours of 07:00-10:00 and 16:00-19:00 and recorded direction, volume and classification of traffic.

Notwithstanding the above, the LHA would request for new surveys to be carried out the junctions listed above as the data is more than three years old. Covid adjustment factors should be applied to the flows and these can be obtained from the NDI team by contacting ndi@leics.gov.uk. As mentioned early the Applicant should also contact the NDI team with respective to obtaining Section 50 permits for the surveys.

Once these surveys have been undertaken, the LHA would request for the junction capacity assessments to be re-run Assessments are also required include Fosse Way/ High Street and Barkby Road/ Pembroke Avenue junctions. The results should be submitted to the LHA for review, including the ARCADY and PICADY modelling files. The 2022 base flows should be factored up to a future year of 2027, with the TEMPro growth factors to also be revised. The LHA are aware of a number of committed developments within the vicinity of this application site and their traffic flows on the local network would have an effect. The Applicant should therefore contact Charnwood Borough Council for a definitive list, and include these in their assessment.

Internal Layout

As the application is in outline, with only access to be determined at this stage, the submitted indicative site layout and matters such as the proposed numbers of parking spaces have not been reviewed or considered by the LHA in preparing this response. However, the TA suggests that the internal road network would be put forward for adoption and accordingly, the LHA advises that the proposals are required to be designed in accordance with the prevailing Leicestershire Highways Design Guide (LHDG) and local parking standards when a future reserved matters application is submitted.

Transport Sustainability

The LHA would require that the Applicant should to explore/develop options for a flexible form of transport provision, which whilst not necessarily adhering to the minimum hourly frequency, does cover the whole of the day 7-7pm (Monday-Friday) and 8-6pm Saturday. It could take the form of a demand based model. The Applicant should explore options and then submit proposals to the LHA for approval, after which they would then go and secure the service/provision.

Travel Plan

The Applicant has submitted a Travel Plan which has been reviewed by the LHA. Notwithstanding the above, the Travel Plan is considered to be comprehensive with many positive features including modal shift targets and clear reference to local sustainable travel where possible. When a Travel Plan Coordinator (TPC) has been appointed by the developer of the site, contact details of the TPC will be forwarded to LCC. The TPC's full responsibilities are listed in the Travel Plan and are acceptable.

Date Received	Case Officer	Reviewer	Date issued
18 March 2022	Suraj Dave	AW	13 May 2022

Appendix B

ATC Survey

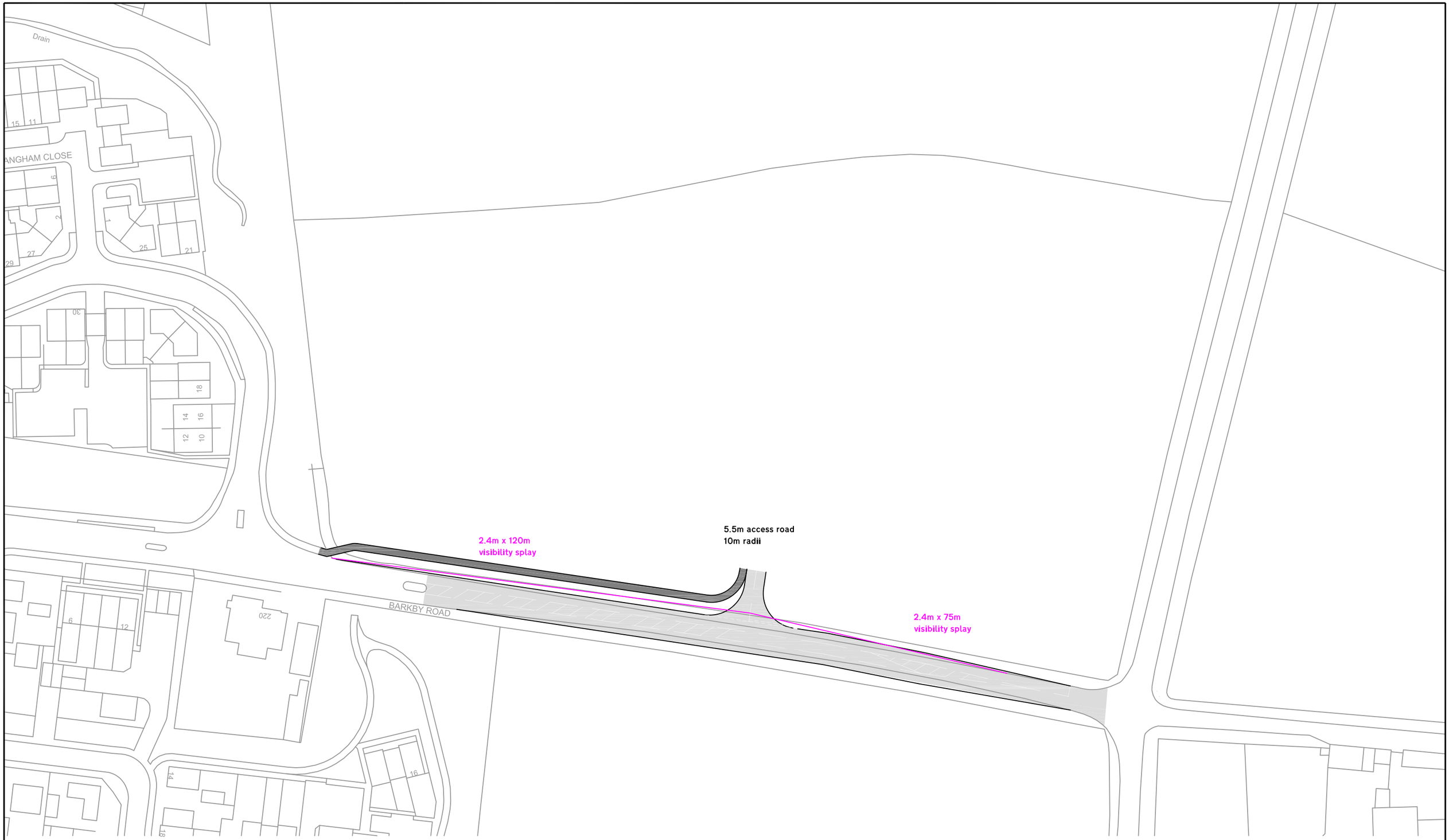
10561		SYSTON								
		JUNE 2021								
Site	Location	Direction	Start Date	End Date	Posted Speed Limit (PSL)	Total Vehicles	5 Day Ave.	7 Day Ave.	Average 85%ile Speed	Average Mean Speed
Site No: 10561004	Site 4 - Barkby Rd, Syston att to warning sign 52.69243, -1.05782	Channel: Eastbound	Sat 19-Jun-21	Fri 25-Jun-21	40	14103	2173	2015	42.9	36.4
		Channel: Westbound	Sat 19-Jun-21	Fri 25-Jun-21		14381	2204	2054	39.9	34.3

Data produced by
Auto Surveys Ltd

Direction	Recorded 85%ile speed		survey weather conditions	Wet weather design speed (with adjustment where appropriate)			Criteria	reaction time	deceleration rate	gradient	stopping sight distance	bonnet adjusted SSD
	mph	kph		mph	kph	m/s		s	m/s^2	%	m	m
Channel: Eastbound	42.9	69.0	dry	40.4	65.0	18.1	MfS	1.5	4.4	0.0	64.0	66.4
Channel: Westbound	39.9	64.2	dry	37.4	60.2	16.7	MfS	1.5	4.4	0.0	56.7	59.1

Appendix C

Site Access Plan / Visibility Splay



REV	DESCRIPTION	DRAWN	INITIALS	DATE

DRAWING STATUS	CHECKED BY	DATE

david tucker associates
transport planning consultants

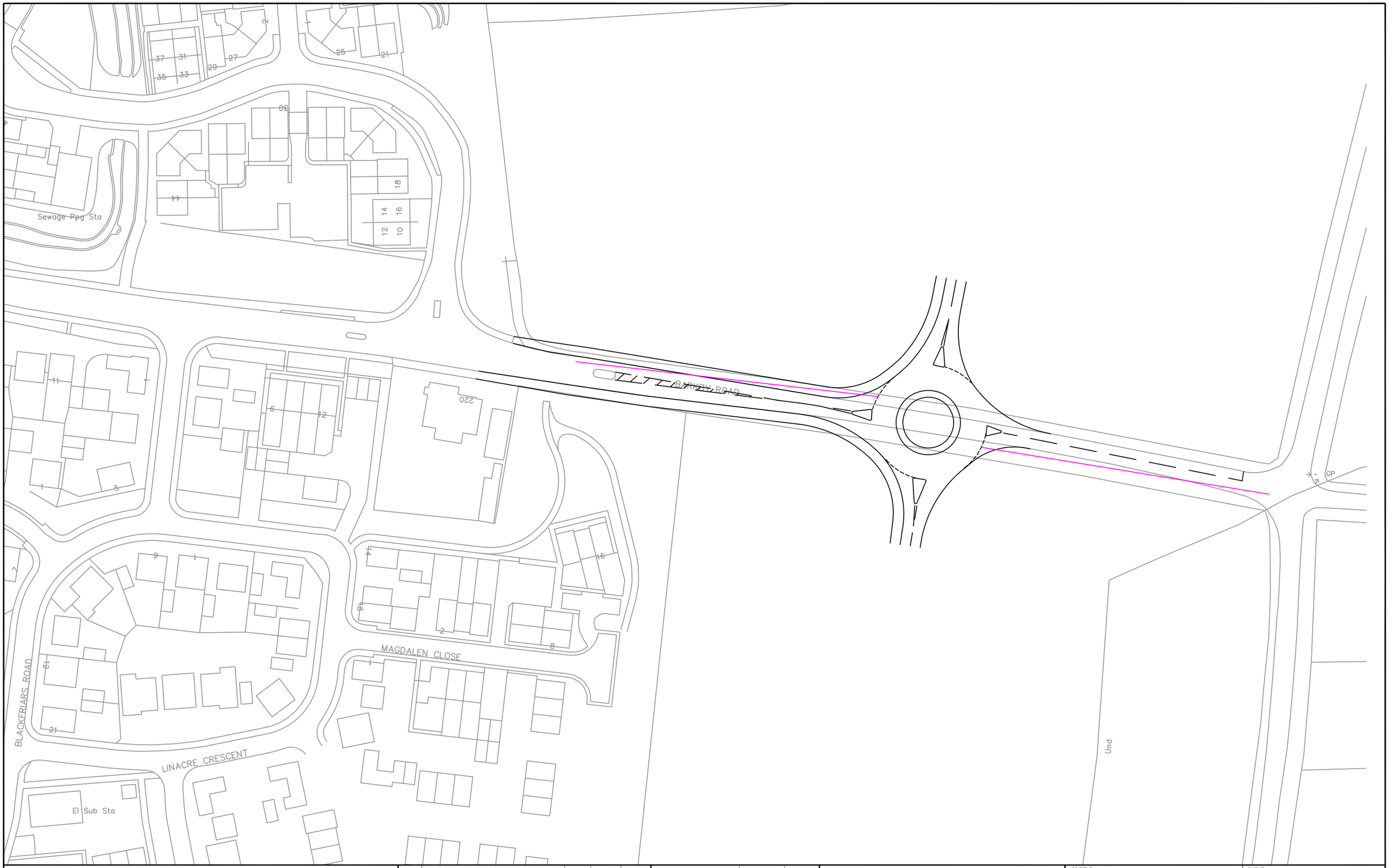
Forester House, Doctors Lane,
Henley In Arden,
Warwickshire B95 5AW
Tel: +44(0)1564 793598
Fax: +44(0)1564 793983
www.dtatransportation.co.uk

JOB TITLE	CLIENT
Syston	Taylor Wimpey

DRAWING TITLE

Proposed Site Access
Right Turn Lane Northern Site

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1/1000@A3	RM	Nov21	20060–02	C



REV	DESCRIPTION	DRAWN	INITIALS	DATE

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JOB TITLE	CLIENT
Syston	Taylor Wimpey

DRAWING TITLE

Proposed Site Access

SCALE	DRAWN BY	DATE	DRAWING No	REVISION
1/1000@A3	BP	Oct 2017	19407–02	

Appendix D

Allocated Site HA2 Trip rates

A114488 - Proposed Residential Development, Queniborough Road,Syston
Trip Generation

Proposed number of dwellings 251

Trip generation has been estimated using trip rates from the Residential (Privately Owned) Category in the TRICS database. Trip rates are shown in **Table 1**.

Table 1 - TRICS 'Residential (Houses Privately Owned)' Trip Rates

Mode	AM (08:00-09:00)			PM (17:00-18:00)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Vehicles	0.127	0.392	0.519	0.374	0.193	0.567
Taxis	0.003	0.003	0.006	0.002	0.001	0.003
OGVs	0.003	0.002	0.005	0.001	0.001	0.002
PSVs	0.003	0.003	0.006	0.000	0.000	0.000
Cyclists	0.003	0.011	0.014	0.006	0.004	0.010
Vehicle Occupants	0.163	0.645	0.808	0.580	0.281	0.861
Pedestrians	0.028	0.070	0.098	0.049	0.028	0.077
Public Transport Users	0.001	0.030	0.031	0.014	0.002	0.016
Total People	0.196	0.756	0.952	0.648	0.315	0.963

Using the trip rates in **Table 1**, trip generation for a residential development with 251 dwellings is shown in **Table 2**.

Table 2 - Trip Generation

Mode	AM (08:00-09:00)			PM (17:00-18:00)		
	Arrivals	Departures	Total	Arrivals	Departures	Total
Vehicles	32	98	130	94	48	142
Taxis	1	1	2	1	0	1
OGVs	1	1	1	0	0	1
PSVs	1	1	2	0	0	0
Cyclists	1	3	4	2	1	3
Vehicle Occupants	41	162	203	146	71	216
Pedestrians	7	18	25	12	7	19
Public Transport Users	0	8	8	4	1	4
Total People	49	190	239	163	79	242

WYG Lakeview Drive Nottingham Licence No: 705124

Calculation Reference: AUDIT-705124-210909-0928

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	1 days
	HC	HAMPSHIRE	1 days
	HF	HERTFORDSHIRE	1 days
	KC	KENT	4 days
	SC	SURREY	1 days
	WS	WEST SUSSEX	3 days
03	SOUTH WEST		
	DV	DEVON	2 days
04	EAST ANGLIA		
	NF	NORFOLK	2 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	ST	STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	1 days
09	NORTH		
	DH	DURHAM	1 days
11	SCOTLAND		
	FA	FALKIRK	1 days
12	CONNAUGHT		
	CS	SLIGO	1 days
	LT	LEITRIM	1 days
13	MUNSTER		
	WA	WATERFORD	1 days
14	LEINSTER		
	WC	WICKLOW	1 days
15	GREATER DUBLIN		
	DL	DUBLIN	1 days
16	ULSTER (REPUBLIC OF IRELAND)		
	CV	CAVAN	1 days
	DN	DONEGAL	3 days
17	ULSTER (NORTHERN IRELAND)		
	AN	ANTRIM	2 days
	DO	DOWN	1 days

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

Primary Filtering selection:

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

Parameter: No of Dwellings
Actual Range: 50 to 432 (units:)
Range Selected by User: 50 to 500 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: Selected: 1 to 4 Actual: 0.23 to 8.75

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/13 to 31/01/20

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	8 days
Tuesday	5 days
Wednesday	10 days
Thursday	6 days
Friday	4 days

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

Selected survey types:

Manual count	33 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	11
Edge of Town	19
Neighbourhood Centre (PPS6 Local Centre)	3

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

Selected Location Sub Categories:

Residential Zone	26
Village	3
No Sub Category	4

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

Secondary Filtering selection:

Use Class:

C3	33 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 500m Range:
All Surveys Included

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	2 days
1,001 to 5,000	7 days
5,001 to 10,000	9 days
10,001 to 15,000	10 days
15,001 to 20,000	2 days
20,001 to 25,000	3 days

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

Population within 5 miles:

5,000 or Less	1 days
5,001 to 25,000	11 days
25,001 to 50,000	6 days
50,001 to 75,000	4 days
75,001 to 100,000	9 days
100,001 to 125,000	2 days

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

Car ownership within 5 miles:

0.6 to 1.0	6 days
1.1 to 1.5	23 days
1.6 to 2.0	4 days

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

Travel Plan:

Yes	6 days
No	27 days

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

PTAL Rating:

No PTAL Present	33 days

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

LIST OF SITES relevant to selection parameters

1 AN-03-A-08 HOUSES & FLATS ANTRIM
BALLINDERRY ROAD
LISBURN

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 204
Survey date: TUESDAY *29/10/13* *Survey Type: MANUAL*

2 AN-03-A-09 DETACHED & SEMI-DETACHED ANTRIM
SLOEFIELD DRIVE
CARRICKFERGUS

Edge of Town
No Sub Category
Total No of Dwellings: 151
Survey date: WEDNESDAY *12/10/16* *Survey Type: MANUAL*

3 CS-03-A-04 DETACHED & SEMI-DETACHED SLIGO
R292
STRANDHILL

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 63
Survey date: THURSDAY *27/10/16* *Survey Type: MANUAL*

4 CV-03-A-02 DETACHED & SEMI DETACHED CAVAN
R212 DUBLIN ROAD
CAVAN
KILLYNEBBER
Edge of Town
No Sub Category
Total No of Dwellings: 80
Survey date: MONDAY *22/05/17* *Survey Type: MANUAL*

5 DH-03-A-01 SEMI DETACHED DURHAM
GREENFIELDS ROAD
BISHOP AUCKLAND

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 50
Survey date: TUESDAY *28/03/17* *Survey Type: MANUAL*

6 DL-03-A-10 SEMI DETACHED & DETACHED DUBLIN
R124
MALAHIDE
SAINT HELENS
Edge of Town
Residential Zone
Total No of Dwellings: 65
Survey date: WEDNESDAY *20/06/18* *Survey Type: MANUAL*

7 DN-03-A-03 DETACHED/SEMI-DETACHED DONEGAL
THE GRANGE
LETTERKENNY
GLENCAR IRISH
Edge of Town
Residential Zone
Total No of Dwellings: 50
Survey date: MONDAY *01/09/14* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 DN-03-A-04 SEMI-DETACHED DONEGAL
GORTLEE ROAD
LETTERKENNY
GORTLEE
Edge of Town
Residential Zone
Total No of Dwellings: 83
Survey date: FRIDAY *26/09/14* *Survey Type: MANUAL*

9 DN-03-A-05 DETACHED/SEMI-DETACHED DONEGAL
GORTLEE ROAD
LETTERKENNY
GORTLEE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 146
Survey date: WEDNESDAY *03/09/14* *Survey Type: MANUAL*

10 DO-03-A-03 DETACHED/SEMI DETACHED DOWN
OLD MILL HEIGHTS
BELFAST
DUNDONALD
Edge of Town
Residential Zone
Total No of Dwellings: 79
Survey date: WEDNESDAY *23/10/13* *Survey Type: MANUAL*

11 DV-03-A-02 HOUSES & BUNGALOWS DEVON
MILLHEAD ROAD
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 116
Survey date: FRIDAY *25/09/15* *Survey Type: MANUAL*

12 DV-03-A-03 TERRACED & SEMI DETACHED DEVON
LOWER BRAND LANE
HONITON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 70
Survey date: MONDAY *28/09/15* *Survey Type: MANUAL*

13 ES-03-A-04 MIXED HOUSES & FLATS EAST SUSSEX
NEW LYDD ROAD
CAMBER

Edge of Town
Residential Zone
Total No of Dwellings: 134
Survey date: FRIDAY *15/07/16* *Survey Type: MANUAL*

14 FA-03-A-02 MIXED HOUSES FALKIRK
ROSEBANK AVENUE & SPRINGFIELD DRIVE
FALKIRK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 161
Survey date: WEDNESDAY *29/05/13* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

15 HC-03-A-23 HOUSES & FLATS HAMPSHIRE
CANADA WAY
LIPHOOK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 62
Survey date: TUESDAY *19/11/19* *Survey Type: MANUAL*

16 HF-03-A-03 MIXED HOUSES HERTFORDSHIRE
HARE STREET ROAD
BUNTINGFORD

Edge of Town
Residential Zone
Total No of Dwellings: 160
Survey date: MONDAY *08/07/19* *Survey Type: MANUAL*

17 KC-03-A-03 MIXED HOUSES & FLATS KENT
HYTHE ROAD
ASHFORD
WILLESBOROUGH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 51
Survey date: THURSDAY *14/07/16* *Survey Type: MANUAL*

18 KC-03-A-06 MIXED HOUSES & FLATS KENT
MARGATE ROAD
HERNE BAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 363
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

19 KC-03-A-07 MIXED HOUSES KENT
RECULVER ROAD
HERNE BAY

Edge of Town
Residential Zone
Total No of Dwellings: 288
Survey date: WEDNESDAY *27/09/17* *Survey Type: MANUAL*

20 KC-03-A-08 MIXED HOUSES KENT
MAIDSTONE ROAD
CHARING

Neighbourhood Centre (PPS6 Local Centre)
Village
Total No of Dwellings: 159
Survey date: TUESDAY *22/05/18* *Survey Type: MANUAL*

21 LT-03-A-01 SEMI-DETACHED & DETACHED LEITRIM
ARD NA SI
CARRICK-ON-SHANNON
ATTIRORY
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 90
Survey date: FRIDAY *24/04/15* *Survey Type: MANUAL*

22 NE-03-A-02 SEMI DETACHED & DETACHED NORTH EAST LINCOLNSHIRE
HANOVER WALK
SCUNTHORPE

Edge of Town
No Sub Category
Total No of Dwellings: 432
Survey date: MONDAY *12/05/14* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

23 NF-03-A-04 MIXED HOUSES NORFOLK
NORTH WALSHAM ROAD
NORTH WALSHAM

Edge of Town
Residential Zone
Total No of Dwellings: 70
Survey date: WEDNESDAY *18/09/19* *Survey Type: MANUAL*

24 NF-03-A-06 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 275
Survey date: MONDAY *23/09/19* *Survey Type: MANUAL*

25 NY-03-A-09 MIXED HOUSING NORTH YORKSHIRE
GRAMMAR SCHOOL LANE
NORTHALLERTON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 52
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

26 SC-03-A-04 DETACHED & TERRACED SURREY
HIGH ROAD
BYFLEET

Edge of Town
Residential Zone
Total No of Dwellings: 71
Survey date: THURSDAY *23/01/14* *Survey Type: MANUAL*

27 SH-03-A-05 SEMI-DETACHED/TERRACED SHROPSHIRE
SANDCROFT
TELFORD
SUTTON HILL
Edge of Town
Residential Zone
Total No of Dwellings: 54
Survey date: THURSDAY *24/10/13* *Survey Type: MANUAL*

28 ST-03-A-07 DETACHED & SEMI-DETACHED STAFFORDSHIRE
BEACONSIDE
STAFFORD
MARSTON GATE
Edge of Town
Residential Zone
Total No of Dwellings: 248
Survey date: WEDNESDAY *22/11/17* *Survey Type: MANUAL*

29 WA-03-A-04 DETACHED WATERFORD
MAYPARK LANE
WATERFORD

Edge of Town
Residential Zone
Total No of Dwellings: 280
Survey date: TUESDAY *24/06/14* *Survey Type: MANUAL*

30 WC-03-A-01 DETACHED HOUSES WICKLOW
STATION ROAD
WICKLOW
CORPORATION MURRAGH
Edge of Town
No Sub Category
Total No of Dwellings: 50
Survey date: MONDAY *28/05/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

31	WS-03-A-04	MIXED HOUSES		WEST SUSSEX
	HILLS FARM LANE			
	HORSHAM			
	BROADBRIDGE HEATH			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:		151	
	Survey date: THURSDAY		*11/12/14*	*Survey Type: MANUAL*
32	WS-03-A-07	BUNGALOWS		WEST SUSSEX
	EMMS LANE			
	NEAR HORSHAM			
	BROOKS GREEN			
	Neighbourhood Centre (PPS6 Local Centre)			
	Village			
	Total No of Dwellings:		57	
	Survey date: THURSDAY		*19/10/17*	*Survey Type: MANUAL*
33	WS-03-A-10	MIXED HOUSES		WEST SUSSEX
	TODDINGTON LANE			
	LITTLEHAMPTON			
	WICK			
	Edge of Town			
	Residential Zone			
	Total No of Dwellings:		79	
	Survey date: WEDNESDAY		*07/11/18*	*Survey Type: MANUAL*

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.065	33	135	0.252	33	135	0.317
08:00 - 09:00	33	135	0.127	33	135	0.392	33	135	0.519
09:00 - 10:00	33	135	0.160	33	135	0.190	33	135	0.350
10:00 - 11:00	33	135	0.133	33	135	0.168	33	135	0.301
11:00 - 12:00	33	135	0.131	33	135	0.162	33	135	0.293
12:00 - 13:00	33	135	0.188	33	135	0.170	33	135	0.358
13:00 - 14:00	33	135	0.178	33	135	0.178	33	135	0.356
14:00 - 15:00	33	135	0.199	33	135	0.209	33	135	0.408
15:00 - 16:00	33	135	0.282	33	135	0.188	33	135	0.470
16:00 - 17:00	33	135	0.302	33	135	0.185	33	135	0.487
17:00 - 18:00	33	135	0.374	33	135	0.193	33	135	0.567
18:00 - 19:00	33	135	0.298	33	135	0.208	33	135	0.506
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.437			2.495			4.932

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

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

Parameter summary

Trip rate parameter range selected:	50 - 432 (units:)
Survey date date range:	01/01/13 - 31/01/20
Number of weekdays (Monday-Friday):	33
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	3
Surveys manually removed from selection:	0

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TAXIS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.002	33	135	0.002	33	135	0.004
08:00 - 09:00	33	135	0.003	33	135	0.003	33	135	0.006
09:00 - 10:00	33	135	0.003	33	135	0.002	33	135	0.005
10:00 - 11:00	33	135	0.002	33	135	0.002	33	135	0.004
11:00 - 12:00	33	135	0.004	33	135	0.004	33	135	0.008
12:00 - 13:00	33	135	0.003	33	135	0.002	33	135	0.005
13:00 - 14:00	33	135	0.003	33	135	0.002	33	135	0.005
14:00 - 15:00	33	135	0.002	33	135	0.003	33	135	0.005
15:00 - 16:00	33	135	0.005	33	135	0.004	33	135	0.009
16:00 - 17:00	33	135	0.004	33	135	0.004	33	135	0.008
17:00 - 18:00	33	135	0.002	33	135	0.001	33	135	0.003
18:00 - 19:00	33	135	0.002	33	135	0.003	33	135	0.005
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.035			0.032			0.067

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.001	33	135	0.001	33	135	0.002
08:00 - 09:00	33	135	0.003	33	135	0.002	33	135	0.005
09:00 - 10:00	33	135	0.004	33	135	0.003	33	135	0.007
10:00 - 11:00	33	135	0.003	33	135	0.004	33	135	0.007
11:00 - 12:00	33	135	0.002	33	135	0.002	33	135	0.004
12:00 - 13:00	33	135	0.003	33	135	0.004	33	135	0.007
13:00 - 14:00	33	135	0.002	33	135	0.001	33	135	0.003
14:00 - 15:00	33	135	0.002	33	135	0.002	33	135	0.004
15:00 - 16:00	33	135	0.004	33	135	0.003	33	135	0.007
16:00 - 17:00	33	135	0.002	33	135	0.002	33	135	0.004
17:00 - 18:00	33	135	0.001	33	135	0.001	33	135	0.002
18:00 - 19:00	33	135	0.001	33	135	0.001	33	135	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.028			0.026			0.054

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.000	33	135	0.000	33	135	0.000
08:00 - 09:00	33	135	0.003	33	135	0.003	33	135	0.006
09:00 - 10:00	33	135	0.000	33	135	0.000	33	135	0.000
10:00 - 11:00	33	135	0.000	33	135	0.000	33	135	0.000
11:00 - 12:00	33	135	0.001	33	135	0.001	33	135	0.002
12:00 - 13:00	33	135	0.000	33	135	0.000	33	135	0.000
13:00 - 14:00	33	135	0.000	33	135	0.000	33	135	0.000
14:00 - 15:00	33	135	0.001	33	135	0.001	33	135	0.002
15:00 - 16:00	33	135	0.002	33	135	0.002	33	135	0.004
16:00 - 17:00	33	135	0.000	33	135	0.000	33	135	0.000
17:00 - 18:00	33	135	0.000	33	135	0.000	33	135	0.000
18:00 - 19:00	33	135	0.000	33	135	0.000	33	135	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.007			0.007			0.014

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.003	33	135	0.006	33	135	0.009
08:00 - 09:00	33	135	0.003	33	135	0.011	33	135	0.014
09:00 - 10:00	33	135	0.001	33	135	0.003	33	135	0.004
10:00 - 11:00	33	135	0.002	33	135	0.003	33	135	0.005
11:00 - 12:00	33	135	0.002	33	135	0.002	33	135	0.004
12:00 - 13:00	33	135	0.003	33	135	0.003	33	135	0.006
13:00 - 14:00	33	135	0.003	33	135	0.002	33	135	0.005
14:00 - 15:00	33	135	0.003	33	135	0.002	33	135	0.005
15:00 - 16:00	33	135	0.005	33	135	0.003	33	135	0.008
16:00 - 17:00	33	135	0.006	33	135	0.005	33	135	0.011
17:00 - 18:00	33	135	0.006	33	135	0.004	33	135	0.010
18:00 - 19:00	33	135	0.004	33	135	0.003	33	135	0.007
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.041			0.047			0.088

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.079	33	135	0.374	33	135	0.453
08:00 - 09:00	33	135	0.163	33	135	0.645	33	135	0.808
09:00 - 10:00	33	135	0.201	33	135	0.281	33	135	0.482
10:00 - 11:00	33	135	0.169	33	135	0.239	33	135	0.408
11:00 - 12:00	33	135	0.174	33	135	0.232	33	135	0.406
12:00 - 13:00	33	135	0.251	33	135	0.233	33	135	0.484
13:00 - 14:00	33	135	0.248	33	135	0.249	33	135	0.497
14:00 - 15:00	33	135	0.280	33	135	0.291	33	135	0.571
15:00 - 16:00	33	135	0.464	33	135	0.270	33	135	0.734
16:00 - 17:00	33	135	0.488	33	135	0.270	33	135	0.758
17:00 - 18:00	33	135	0.580	33	135	0.281	33	135	0.861
18:00 - 19:00	33	135	0.465	33	135	0.313	33	135	0.778
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.562			3.678			7.240

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.012	33	135	0.033	33	135	0.045
08:00 - 09:00	33	135	0.028	33	135	0.070	33	135	0.098
09:00 - 10:00	33	135	0.032	33	135	0.044	33	135	0.076
10:00 - 11:00	33	135	0.036	33	135	0.043	33	135	0.079
11:00 - 12:00	33	135	0.029	33	135	0.027	33	135	0.056
12:00 - 13:00	33	135	0.032	33	135	0.027	33	135	0.059
13:00 - 14:00	33	135	0.039	33	135	0.037	33	135	0.076
14:00 - 15:00	33	135	0.042	33	135	0.038	33	135	0.080
15:00 - 16:00	33	135	0.068	33	135	0.046	33	135	0.114
16:00 - 17:00	33	135	0.061	33	135	0.037	33	135	0.098
17:00 - 18:00	33	135	0.049	33	135	0.028	33	135	0.077
18:00 - 19:00	33	135	0.038	33	135	0.043	33	135	0.081
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.466			0.473			0.939

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL BUS/TRAM PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.000	33	135	0.006	33	135	0.006
08:00 - 09:00	33	135	0.001	33	135	0.021	33	135	0.022
09:00 - 10:00	33	135	0.002	33	135	0.009	33	135	0.011
10:00 - 11:00	33	135	0.003	33	135	0.003	33	135	0.006
11:00 - 12:00	33	135	0.003	33	135	0.003	33	135	0.006
12:00 - 13:00	33	135	0.003	33	135	0.004	33	135	0.007
13:00 - 14:00	33	135	0.003	33	135	0.002	33	135	0.005
14:00 - 15:00	33	135	0.003	33	135	0.004	33	135	0.007
15:00 - 16:00	33	135	0.015	33	135	0.006	33	135	0.021
16:00 - 17:00	33	135	0.009	33	135	0.003	33	135	0.012
17:00 - 18:00	33	135	0.007	33	135	0.002	33	135	0.009
18:00 - 19:00	33	135	0.012	33	135	0.003	33	135	0.015
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.061			0.066			0.127

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL RAIL PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.000	33	135	0.007	33	135	0.007
08:00 - 09:00	33	135	0.000	33	135	0.008	33	135	0.008
09:00 - 10:00	33	135	0.000	33	135	0.002	33	135	0.002
10:00 - 11:00	33	135	0.000	33	135	0.000	33	135	0.000
11:00 - 12:00	33	135	0.000	33	135	0.001	33	135	0.001
12:00 - 13:00	33	135	0.000	33	135	0.001	33	135	0.001
13:00 - 14:00	33	135	0.000	33	135	0.000	33	135	0.000
14:00 - 15:00	33	135	0.000	33	135	0.000	33	135	0.000
15:00 - 16:00	33	135	0.002	33	135	0.000	33	135	0.002
16:00 - 17:00	33	135	0.003	33	135	0.000	33	135	0.003
17:00 - 18:00	33	135	0.007	33	135	0.000	33	135	0.007
18:00 - 19:00	33	135	0.006	33	135	0.001	33	135	0.007
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.018			0.020			0.038

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL COACH PASSENGERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.000	33	135	0.000	33	135	0.000
08:00 - 09:00	33	135	0.000	33	135	0.002	33	135	0.002
09:00 - 10:00	33	135	0.000	33	135	0.000	33	135	0.000
10:00 - 11:00	33	135	0.000	33	135	0.000	33	135	0.000
11:00 - 12:00	33	135	0.000	33	135	0.000	33	135	0.000
12:00 - 13:00	33	135	0.000	33	135	0.000	33	135	0.000
13:00 - 14:00	33	135	0.000	33	135	0.000	33	135	0.000
14:00 - 15:00	33	135	0.001	33	135	0.000	33	135	0.001
15:00 - 16:00	33	135	0.001	33	135	0.000	33	135	0.001
16:00 - 17:00	33	135	0.000	33	135	0.000	33	135	0.000
17:00 - 18:00	33	135	0.000	33	135	0.000	33	135	0.000
18:00 - 19:00	33	135	0.000	33	135	0.000	33	135	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.000	33	135	0.012	33	135	0.012
08:00 - 09:00	33	135	0.001	33	135	0.030	33	135	0.031
09:00 - 10:00	33	135	0.002	33	135	0.011	33	135	0.013
10:00 - 11:00	33	135	0.003	33	135	0.004	33	135	0.007
11:00 - 12:00	33	135	0.003	33	135	0.004	33	135	0.007
12:00 - 13:00	33	135	0.003	33	135	0.005	33	135	0.008
13:00 - 14:00	33	135	0.003	33	135	0.002	33	135	0.005
14:00 - 15:00	33	135	0.004	33	135	0.004	33	135	0.008
15:00 - 16:00	33	135	0.018	33	135	0.007	33	135	0.025
16:00 - 17:00	33	135	0.012	33	135	0.003	33	135	0.015
17:00 - 18:00	33	135	0.014	33	135	0.002	33	135	0.016
18:00 - 19:00	33	135	0.018	33	135	0.004	33	135	0.022
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.081			0.088			0.169

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.094	33	135	0.426	33	135	0.520
08:00 - 09:00	33	135	0.196	33	135	0.756	33	135	0.952
09:00 - 10:00	33	135	0.235	33	135	0.339	33	135	0.574
10:00 - 11:00	33	135	0.210	33	135	0.288	33	135	0.498
11:00 - 12:00	33	135	0.209	33	135	0.264	33	135	0.473
12:00 - 13:00	33	135	0.289	33	135	0.268	33	135	0.557
13:00 - 14:00	33	135	0.293	33	135	0.290	33	135	0.583
14:00 - 15:00	33	135	0.329	33	135	0.334	33	135	0.663
15:00 - 16:00	33	135	0.555	33	135	0.326	33	135	0.881
16:00 - 17:00	33	135	0.566	33	135	0.315	33	135	0.881
17:00 - 18:00	33	135	0.648	33	135	0.315	33	135	0.963
18:00 - 19:00	33	135	0.524	33	135	0.363	33	135	0.887
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.148			4.284			8.432

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CARS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.041	33	135	0.167	33	135	0.208
08:00 - 09:00	33	135	0.081	33	135	0.258	33	135	0.339
09:00 - 10:00	33	135	0.099	33	135	0.117	33	135	0.216
10:00 - 11:00	33	135	0.078	33	135	0.103	33	135	0.181
11:00 - 12:00	33	135	0.079	33	135	0.097	33	135	0.176
12:00 - 13:00	33	135	0.111	33	135	0.103	33	135	0.214
13:00 - 14:00	33	135	0.111	33	135	0.107	33	135	0.218
14:00 - 15:00	33	135	0.122	33	135	0.132	33	135	0.254
15:00 - 16:00	33	135	0.176	33	135	0.112	33	135	0.288
16:00 - 17:00	33	135	0.194	33	135	0.114	33	135	0.308
17:00 - 18:00	33	135	0.241	33	135	0.120	33	135	0.361
18:00 - 19:00	33	135	0.207	33	135	0.136	33	135	0.343
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.540			1.566			3.106

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL LGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.013	33	135	0.026	33	135	0.039
08:00 - 09:00	33	135	0.016	33	135	0.022	33	135	0.038
09:00 - 10:00	33	135	0.021	33	135	0.019	33	135	0.040
10:00 - 11:00	33	135	0.021	33	135	0.023	33	135	0.044
11:00 - 12:00	33	135	0.014	33	135	0.018	33	135	0.032
12:00 - 13:00	33	135	0.020	33	135	0.016	33	135	0.036
13:00 - 14:00	33	135	0.021	33	135	0.020	33	135	0.041
14:00 - 15:00	33	135	0.018	33	135	0.017	33	135	0.035
15:00 - 16:00	33	135	0.023	33	135	0.020	33	135	0.043
16:00 - 17:00	33	135	0.022	33	135	0.021	33	135	0.043
17:00 - 18:00	33	135	0.028	33	135	0.016	33	135	0.044
18:00 - 19:00	33	135	0.015	33	135	0.016	33	135	0.031
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.232			0.234			0.466

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

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

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL MOTOR CYCLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	33	135	0.000	33	135	0.001	33	135	0.001
08:00 - 09:00	33	135	0.000	33	135	0.002	33	135	0.002
09:00 - 10:00	33	135	0.001	33	135	0.002	33	135	0.003
10:00 - 11:00	33	135	0.001	33	135	0.000	33	135	0.001
11:00 - 12:00	33	135	0.000	33	135	0.001	33	135	0.001
12:00 - 13:00	33	135	0.000	33	135	0.001	33	135	0.001
13:00 - 14:00	33	135	0.001	33	135	0.001	33	135	0.002
14:00 - 15:00	33	135	0.001	33	135	0.001	33	135	0.002
15:00 - 16:00	33	135	0.001	33	135	0.000	33	135	0.001
16:00 - 17:00	33	135	0.003	33	135	0.001	33	135	0.004
17:00 - 18:00	33	135	0.002	33	135	0.000	33	135	0.002
18:00 - 19:00	33	135	0.001	33	135	0.001	33	135	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.011			0.011			0.022

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

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

Appendix E

Capacity Assessment Outputs

Junctions 10

ARCADY 10 - Roundabout Module

Filename: Melton- HIgh Street roundabout - REV C.j10
Path: P:\20000's\20060\Technical\Junction Modelling\2022 Junction Assessments
Report generation date: 17/06/2022 13:42:44

Summary of junction performance

	AM			PM		
	Q (PCU)	Delay (s)	RFC	Q (PCU)	Delay (s)	RFC
	2022					
1 - Melton Road N	1.5	8.38	0.59	1.5	8.77	0.59
2 - Barkby Road	1.1	19.24	0.53	2.1	27.17	0.69
3 - Melton Road S	1.3	10.39	0.55	2.1	13.73	0.67
4 - High Street	1.1	9.59	0.52	2.9	19.36	0.74
	2027					
1 - Melton Road N	1.6	9.04	0.62	1.7	9.57	0.62
2 - Barkby Road	1.3	21.62	0.57	2.6	32.47	0.73
3 - Melton Road S	1.5	11.17	0.58	2.4	15.34	0.70
4 - High Street	1.2	10.34	0.55	3.7	23.52	0.79
	2027 + Development					
1 - Melton Road N	1.7	9.24	0.62	1.7	10.10	0.63
2 - Barkby Road	1.7	24.86	0.64	3.3	39.12	0.78
3 - Melton Road S	1.5	11.61	0.59	2.5	15.96	0.71
4 - High Street	1.3	10.82	0.57	4.7	28.90	0.83

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

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	01/03/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DTA\arcady
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓
D5	2027	AM	ONE HOUR	07:45	09:15	15	✓
D6	2027	PM	ONE HOUR	16:45	18:15	15	✓
D7	2027 + Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2027 + Development	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

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Last Run	2 - Barkby Road - Capacity	Ped Crossing causes blocking on previous arm due to traffic queing to leave the junction in 2 timesegment(s).

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	10.56	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.56	B

Arms

Arms

Arm	Name	Description	No give-way line
1	Melton Road N		
2	Barkby Road		
3	Melton Road S		
4	High Street		

Roundabout Geometry

Arm	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)	Entry only	Exit only
1 - Melton Road N	3.54	4.22	9.2	8.6	17.7	14.5		
2 - Barkby Road	3.76	4.33	2.0	3.0	17.7	80.0		
3 - Melton Road S	3.75	4.26	3.8	5.0	17.7	12.0		
4 - High Street	2.41	4.35	7.2	12.9	17.7	26.0		

Zebra Crossings

Arm	VGAP (PCU)	Vehs queueing on exit (PCU)	Central Refuge	Crossing data type	Crossing length (m)	Crossing time (s)
2 - Barkby Road	1.00	3.00		Distance	8.00	5.71
3 - Melton Road S	1.00	1.00		Distance	7.00	5.00

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Melton Road N	0.564	1225
2 - Barkby Road	0.312	675
3 - Melton Road S	0.523	1139
4 - High Street	0.523	1032

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	579	100.000
2 - Barkby Road		ONE HOUR	✓	196	100.000
3 - Melton Road S		ONE HOUR	✓	415	100.000
4 - High Street		ONE HOUR	✓	377	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	500.00
3 - Melton Road S	[ONEHOUR]	500.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	1	81	353	144
	2 - Barkby Road	64	0	0	132
	3 - Melton Road S	299	37	2	77
	4 - High Street	183	89	104	1

Vehicle Mix

HV %s

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	0	3	4	1
	2 - Barkby Road	1	0	1	1
	3 - Melton Road S	6	5	0	8
	4 - High Street	2	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.59	8.38	1.5	A	531	797
2 - Barkby Road	0.53	19.24	1.1	C	180	270
3 - Melton Road S	0.55	10.39	1.3	B	381	571
4 - High Street	0.52	9.59	1.1	A	346	519

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	436	109	174		1127	0.387	433	409	0.0	0.6	5.331	A
2 - Barkby Road	148	37	453	376.43	501	0.295	146	155	0.0	0.4	10.202	B
3 - Melton Road S	312	78	255	376.43	922	0.339	310	343	0.0	0.5	6.235	A
4 - High Street	284	71	301		874	0.325	282	264	0.0	0.5	6.210	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	521	130	209		1107	0.470	519	490	0.6	0.9	6.300	A
2 - Barkby Road	176	44	543	449.49	461	0.382	175	186	0.4	0.6	12.685	B
3 - Melton Road S	373	93	306	449.49	879	0.424	372	412	0.5	0.8	7.529	A
4 - High Street	339	85	361		843	0.402	338	317	0.5	0.7	7.302	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	637	159	256		1081	0.590	635	599	0.9	1.5	8.287	A
2 - Barkby Road	216	54	664	550.51	405	0.533	214	227	0.6	1.1	18.801	C
3 - Melton Road S	457	114	374	550.51	826	0.553	455	504	0.8	1.3	10.260	B
4 - High Street	415	104	441		801	0.518	413	388	0.7	1.1	9.485	A

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	637	159	257		1080	0.590	637	602	1.5	1.5	8.376	A
2 - Barkby Road	216	54	666	550.51	404	0.534	216	228	1.1	1.1	19.245	C
3 - Melton Road S	457	114	376	550.51	825	0.554	457	505	1.3	1.3	10.392	B
4 - High Street	415	104	444		800	0.519	415	390	1.1	1.1	9.589	A

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	521	130	210		1107	0.470	523	495	1.5	0.9	6.381	A
2 - Barkby Road	176	44	546	449.49	460	0.383	178	187	1.1	0.6	12.990	B
3 - Melton Road S	373	93	310	449.49	878	0.425	375	414	1.3	0.8	7.640	A
4 - High Street	339	85	365		841	0.403	340	320	1.1	0.7	7.397	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	436	109	176		1126	0.387	437	413	0.9	0.7	5.393	A
2 - Barkby Road	148	37	457	376.43	499	0.296	148	156	0.6	0.4	10.386	B
3 - Melton Road S	312	78	259	376.43	920	0.340	313	346	0.8	0.6	6.314	A
4 - High Street	284	71	304		873	0.325	285	268	0.7	0.5	6.285	A

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Last Run	2 - Barkby Road - Capacity	Ped Crossing causes blocking on previous arm due to traffic queing to leave the junction in 1 timesegment(s).

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	15.75	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	15.75	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	551	100.000
2 - Barkby Road		ONE HOUR	✓	265	100.000
3 - Melton Road S		ONE HOUR	✓	503	100.000
4 - High Street		ONE HOUR	✓	509	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	500.00
3 - Melton Road S	[ONEHOUR]	500.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	0	97	297	157
	2 - Barkby Road	70	1	80	114
	3 - Melton Road S	331	78	3	91
	4 - High Street	275	157	77	0

Vehicle Mix

HV %s

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	0	2	3	1
	2 - Barkby Road	0	0	0	2
	3 - Melton Road S	6	2	0	1
	4 - High Street	2	11	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.59	8.77	1.5	A	506	758
2 - Barkby Road	0.69	27.17	2.1	D	243	365
3 - Melton Road S	0.67	13.73	2.1	B	462	692
4 - High Street	0.74	19.36	2.9	C	467	701

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	415	104	236		1092	0.380	412	505	0.0	0.6	5.397	A
2 - Barkby Road	200	50	399	376.43	515	0.387	197	249	0.0	0.6	11.315	B
3 - Melton Road S	379	95	255	376.43	924	0.410	376	341	0.0	0.7	6.825	A
4 - High Street	383	96	361		843	0.454	380	270	0.0	0.9	8.091	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	495	124	283		1065	0.465	494	605	0.6	0.9	6.442	A
2 - Barkby Road	238	60	479	449.49	478	0.498	237	298	0.6	1.0	14.946	B
3 - Melton Road S	452	113	306	449.49	881	0.513	451	410	0.7	1.1	8.697	A
4 - High Street	458	114	433		806	0.568	456	324	0.9	1.3	10.732	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	607	152	345		1028	0.590	604	738	0.9	1.4	8.650	A
2 - Barkby Road	292	73	585	550.51	425	0.686	288	364	1.0	2.0	25.578	D
3 - Melton Road S	554	138	373	550.51	828	0.669	550	500	1.1	2.0	13.336	B
4 - High Street	560	140	528		756	0.741	555	395	1.3	2.8	18.245	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	607	152	348		1026	0.591	607	744	1.4	1.5	8.775	A
2 - Barkby Road	292	73	588	550.51	424	0.688	291	366	2.0	2.1	27.168	D
3 - Melton Road S	554	138	376	550.51	827	0.670	554	503	2.0	2.1	13.728	B
4 - High Street	560	140	532		754	0.743	560	398	2.8	2.9	19.357	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	495	124	287		1062	0.466	498	615	1.5	0.9	6.547	A
2 - Barkby Road	238	60	483	449.49	477	0.500	243	302	2.1	1.0	15.783	C
3 - Melton Road S	452	113	311	449.49	879	0.514	456	414	2.1	1.1	8.952	A
4 - High Street	458	114	438		803	0.570	464	329	2.9	1.4	11.328	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	415	104	239		1090	0.381	416	512	0.9	0.6	5.470	A
2 - Barkby Road	200	50	403	376.43	514	0.388	201	252	1.0	0.7	11.659	B
3 - Melton Road S	379	95	259	376.43	922	0.411	380	345	1.1	0.7	6.955	A
4 - High Street	383	96	365		841	0.456	385	274	1.4	0.9	8.333	A

2027, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Last Run	2 - Barkby Road - Capacity	Ped Crossing causes blocking on previous arm due to traffic queing to leave the junction in 2 timesegment(s).

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	11.50	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.50	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2027	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	603	100.000
2 - Barkby Road		ONE HOUR	✓	205	100.000
3 - Melton Road S		ONE HOUR	✓	433	100.000
4 - High Street		ONE HOUR	✓	393	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	500.00
3 - Melton Road S	[ONEHOUR]	500.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	1	84	368	150
	2 - Barkby Road	67	0	0	138
	3 - Melton Road S	312	39	2	80
	4 - High Street	191	93	108	1

Vehicle Mix

HV %s

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	0	3	4	1
	2 - Barkby Road	1	0	1	1
	3 - Melton Road S	6	5	0	8
	4 - High Street	2	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.62	9.04	1.6	A	553	830
2 - Barkby Road	0.57	21.62	1.3	C	188	282
3 - Melton Road S	0.58	11.17	1.5	B	397	596
4 - High Street	0.55	10.34	1.2	B	361	541

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	454	113	182		1123	0.404	451	427	0.0	0.7	5.504	A
2 - Barkby Road	154	39	471	376.43	494	0.312	153	162	0.0	0.5	10.595	B
3 - Melton Road S	326	81	266	376.43	917	0.355	324	358	0.0	0.6	6.421	A
4 - High Street	296	74	314		867	0.341	294	275	0.0	0.5	6.412	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	542	136	218		1102	0.492	541	512	0.7	1.0	6.597	A
2 - Barkby Road	184	46	565	449.49	453	0.407	183	194	0.5	0.7	13.447	B
3 - Melton Road S	389	97	320	449.49	874	0.445	388	429	0.6	0.8	7.856	A
4 - High Street	353	88	377		835	0.423	352	331	0.5	0.7	7.642	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	664	166	266		1075	0.618	661	625	1.0	1.6	8.922	A
2 - Barkby Road	226	56	691	550.51	394	0.572	223	237	0.7	1.3	20.946	C
3 - Melton Road S	477	119	390	550.51	820	0.582	474	524	0.8	1.4	10.996	B
4 - High Street	433	108	461		791	0.547	431	404	0.7	1.2	10.198	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	664	166	268		1074	0.618	664	629	1.6	1.6	9.040	A
2 - Barkby Road	226	56	694	550.51	393	0.574	226	238	1.3	1.3	21.617	C
3 - Melton Road S	477	119	393	550.51	819	0.582	477	526	1.4	1.5	11.172	B
4 - High Street	433	108	463		790	0.548	433	406	1.2	1.2	10.338	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	542	136	220		1101	0.492	545	517	1.6	1.0	6.695	A
2 - Barkby Road	184	46	569	449.49	451	0.408	187	195	1.3	0.7	13.862	B
3 - Melton Road S	389	97	324	449.49	872	0.446	392	432	1.5	0.9	7.996	A
4 - High Street	353	88	381		833	0.424	355	334	1.2	0.8	7.761	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	454	113	184		1122	0.405	455	431	1.0	0.7	5.579	A
2 - Barkby Road	154	39	476	376.43	492	0.313	155	163	0.7	0.5	10.818	B
3 - Melton Road S	326	81	270	376.43	916	0.356	327	361	0.9	0.6	6.513	A
4 - High Street	296	74	318		865	0.342	297	279	0.8	0.5	6.500	A

2027, PM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Last Run	2 - Barkby Road - Capacity	Ped Crossing causes blocking on previous arm due to traffic queing to leave the junction in 2 timesegment(s).

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	18.36	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	18.36	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2027	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	575	100.000
2 - Barkby Road		ONE HOUR	✓	276	100.000
3 - Melton Road S		ONE HOUR	✓	524	100.000
4 - High Street		ONE HOUR	✓	531	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	500.00
3 - Melton Road S	[ONEHOUR]	500.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	0	101	310	164
	2 - Barkby Road	73	1	83	119
	3 - Melton Road S	345	81	3	95
	4 - High Street	287	164	80	0

Vehicle Mix

HV %s

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	0	2	3	1
	2 - Barkby Road	0	0	0	2
	3 - Melton Road S	6	2	0	1
	4 - High Street	2	11	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.62	9.57	1.7	A	528	791
2 - Barkby Road	0.73	32.47	2.6	D	253	380
3 - Melton Road S	0.70	15.34	2.4	C	481	721
4 - High Street	0.79	23.52	3.7	C	487	731

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	433	108	245		1086	0.398	430	526	0.0	0.7	5.587	A
2 - Barkby Road	208	52	417	376.43	509	0.408	205	259	0.0	0.7	11.839	B
3 - Melton Road S	394	99	266	376.43	919	0.429	391	356	0.0	0.8	7.082	A
4 - High Street	400	100	375		836	0.478	396	282	0.0	0.9	8.524	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	517	129	294		1058	0.489	516	631	0.7	1.0	6.773	A
2 - Barkby Road	248	62	499	449.49	470	0.527	246	311	0.7	1.1	16.095	C
3 - Melton Road S	471	118	319	449.49	876	0.538	469	426	0.8	1.2	9.202	A
4 - High Street	477	119	450		796	0.599	475	338	0.9	1.5	11.671	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	633	158	358		1020	0.621	630	768	1.0	1.6	9.392	A
2 - Barkby Road	304	76	610	550.51	415	0.732	298	378	1.1	2.5	29.760	D
3 - Melton Road S	577	144	388	550.51	822	0.702	572	520	1.2	2.3	14.763	B
4 - High Street	585	146	549		745	0.785	577	412	1.5	3.5	21.518	C

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	633	158	362		1017	0.622	633	775	1.6	1.7	9.571	A
2 - Barkby Road	304	76	613	550.51	414	0.735	303	382	2.5	2.6	32.474	D
3 - Melton Road S	577	144	393	550.51	821	0.703	577	524	2.3	2.4	15.345	C
4 - High Street	585	146	553		742	0.787	584	416	3.5	3.7	23.523	C

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	517	129	300		1055	0.490	520	643	1.7	1.0	6.915	A
2 - Barkby Road	248	62	504	449.49	468	0.530	254	316	2.6	1.2	17.356	C
3 - Melton Road S	471	118	326	449.49	874	0.539	476	432	2.4	1.2	9.550	A
4 - High Street	477	119	457		793	0.602	485	344	3.7	1.6	12.602	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	433	108	249		1084	0.399	434	534	1.0	0.7	5.674	A
2 - Barkby Road	208	52	421	376.43	507	0.409	210	263	1.2	0.7	12.267	B
3 - Melton Road S	394	99	270	376.43	917	0.430	396	360	1.2	0.8	7.240	A
4 - High Street	400	100	381		833	0.480	402	286	1.6	1.0	8.828	A

2027 + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Last Run	2 - Barkby Road - Capacity	Ped Crossing causes blocking on previous arm due to traffic queing to leave the junction in 2 timesegment(s).

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	12.44	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.44	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2027 + Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	603	100.000
2 - Barkby Road		ONE HOUR	✓	237	100.000
3 - Melton Road S		ONE HOUR	✓	434	100.000
4 - High Street		ONE HOUR	✓	407	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	100.00
3 - Melton Road S	[ONEHOUR]	500.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	1	84	368	150
	2 - Barkby Road	67	0	3	167
	3 - Melton Road S	312	40	2	80
	4 - High Street	191	107	108	1

Vehicle Mix

HV %s

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	0	3	4	1
	2 - Barkby Road	1	0	1	1
	3 - Melton Road S	6	5	0	8
	4 - High Street	2	2	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.62	9.24	1.7	A	553	830
2 - Barkby Road	0.64	24.86	1.7	C	217	326
3 - Melton Road S	0.59	11.61	1.5	B	398	597
4 - High Street	0.57	10.82	1.3	B	373	560

Main Results for each time segment

07:45 - 08:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	454	113	193		1117	0.407	451	427	0.0	0.7	5.554	A
2 - Barkby Road	178	45	471	75.29	508	0.351	176	173	0.0	0.5	10.905	B
3 - Melton Road S	327	82	288	376.43	908	0.360	324	360	0.0	0.6	6.525	A
4 - High Street	306	77	315		867	0.353	304	297	0.0	0.6	6.533	A

08:00 - 08:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	542	136	231		1095	0.495	541	512	0.7	1.0	6.684	A
2 - Barkby Road	213	53	565	89.90	467	0.456	212	207	0.5	0.8	14.185	B
3 - Melton Road S	390	98	346	449.49	864	0.452	389	431	0.6	0.9	8.037	A
4 - High Street	366	91	378		834	0.439	365	356	0.6	0.8	7.851	A

08:15 - 08:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	664	166	283		1066	0.623	661	625	1.0	1.7	9.113	A
2 - Barkby Road	261	65	691	110.10	408	0.640	258	253	0.8	1.7	23.707	C
3 - Melton Road S	478	119	421	550.51	808	0.591	475	527	0.9	1.5	11.394	B
4 - High Street	448	112	462		790	0.567	446	435	0.8	1.3	10.651	B

08:30 - 08:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	664	166	284		1065	0.623	664	628	1.7	1.7	9.243	A
2 - Barkby Road	261	65	694	110.10	406	0.642	261	254	1.7	1.7	24.858	C
3 - Melton Road S	478	119	425	550.51	807	0.592	478	530	1.5	1.5	11.607	B
4 - High Street	448	112	464		789	0.568	448	438	1.3	1.3	10.818	B

08:45 - 09:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	542	136	233		1094	0.496	545	517	1.7	1.0	6.793	A
2 - Barkby Road	213	53	569	89.90	465	0.458	217	209	1.7	0.9	14.808	B
3 - Melton Road S	390	98	351	449.49	862	0.453	393	435	1.5	0.9	8.198	A
4 - High Street	366	91	382		832	0.440	368	361	1.3	0.8	7.990	A

09:00 - 09:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	454	113	195		1115	0.407	455	432	1.0	0.7	5.631	A
2 - Barkby Road	178	45	476	75.29	506	0.353	180	174	0.9	0.6	11.189	B
3 - Melton Road S	327	82	292	376.43	906	0.360	328	363	0.9	0.6	6.626	A
4 - High Street	306	77	319		865	0.354	307	301	0.8	0.6	6.629	A

2027 + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Last Run	Last Run	2 - Barkby Road - Capacity	Ped Crossing causes blocking on previous arm due to traffic queing to leave the junction in 2 timesegment(s).

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	21.42	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	21.42	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2027 + Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1 - Melton Road N		ONE HOUR	✓	575	100.000
2 - Barkby Road		ONE HOUR	✓	294	100.000
3 - Melton Road S		ONE HOUR	✓	527	100.000
4 - High Street		ONE HOUR	✓	558	100.000

Demand overview (Pedestrians)

Arm	Profile type	Av. Ped flow (Ped/hr)
1 - Melton Road N		
2 - Barkby Road	[ONEHOUR]	500.00
3 - Melton Road S	[ONEHOUR]	500.00
4 - High Street		

Origin-Destination Data

Demand (PCU/hr)

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	0	101	310	164
	2 - Barkby Road	73	1	85	135
	3 - Melton Road S	345	84	3	95
	4 - High Street	287	191	80	0

Vehicle Mix

HV %s

		To			
		1 - Melton Road N	2 - Barkby Road	3 - Melton Road S	4 - High Street
From	1 - Melton Road N	0	2	3	1
	2 - Barkby Road	0	0	0	2
	3 - Melton Road S	6	2	0	1
	4 - High Street	2	11	4	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1 - Melton Road N	0.63	10.10	1.7	B	528	791
2 - Barkby Road	0.78	39.12	3.3	E	270	405
3 - Melton Road S	0.71	15.96	2.5	C	484	725
4 - High Street	0.83	28.90	4.7	D	512	768

Main Results for each time segment

16:45 - 17:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	433	108	268		1074	0.403	430	526	0.0	0.7	5.697	A
2 - Barkby Road	221	55	416	376.43	509	0.435	218	281	0.0	0.8	12.373	B
3 - Melton Road S	397	99	278	376.43	914	0.434	394	357	0.0	0.8	7.175	A
4 - High Street	420	105	378		834	0.503	416	294	0.0	1.0	8.964	A

17:00 - 17:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	517	129	321		1042	0.496	516	631	0.7	1.0	6.971	A
2 - Barkby Road	264	66	499	449.49	470	0.562	262	337	0.8	1.2	17.315	C
3 - Melton Road S	474	118	334	449.49	871	0.544	472	428	0.8	1.2	9.388	A
4 - High Street	502	125	453		795	0.631	499	353	1.0	1.7	12.671	B

17:15 - 17:30

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	633	158	389		1000	0.633	630	766	1.0	1.7	9.884	A
2 - Barkby Road	324	81	609	550.51	415	0.780	316	410	1.2	3.1	34.547	D
3 - Melton Road S	580	145	405	550.51	816	0.711	575	521	1.2	2.4	15.286	C
4 - High Street	614	154	551		744	0.826	604	429	1.7	4.3	25.437	D

17:30 - 17:45

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	633	158	395		997	0.635	633	775	1.7	1.7	10.098	B
2 - Barkby Road	324	81	613	550.51	413	0.783	323	415	3.1	3.3	39.120	E
3 - Melton Road S	580	145	410	550.51	815	0.712	580	526	2.4	2.5	15.963	C
4 - High Street	614	154	557		741	0.829	613	433	4.3	4.7	28.902	D

17:45 - 18:00

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	517	129	329		1038	0.498	520	645	1.7	1.0	7.144	A
2 - Barkby Road	264	66	505	449.49	468	0.565	272	344	3.3	1.4	19.252	C
3 - Melton Road S	474	118	342	449.49	867	0.546	479	435	2.5	1.3	9.785	A
4 - High Street	502	125	461		791	0.634	513	359	4.7	1.9	14.118	B

18:00 - 18:15

Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Circulating flow (PCU/hr)	Ped demand (Ped/hr)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
1 - Melton Road N	433	108	272		1071	0.404	434	534	1.0	0.7	5.793	A
2 - Barkby Road	221	55	421	376.43	507	0.436	224	285	1.4	0.8	12.908	B
3 - Melton Road S	397	99	283	376.43	912	0.435	399	362	1.3	0.8	7.343	A
4 - High Street	420	105	383		832	0.505	423	298	1.9	1.1	9.350	A

LinSig V1 style report

User and Project Details

Project:	**Syston**
Title:	
Location:	Queniborough Road/ Barkby Road
Additional detail:	
File name:	Queniborough Road_Barkby Road_RevB.lsg3x
Author:	
Company:	David Tucker Associates
Address:	

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Traffic		7	7
D	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D
A		6	6	6
B	6		6	6
C	6	6		6
D	6	6	6	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage \ To Stage	1	2	3	4
1		6	6	6
2	6		6	6
3	6	6		6
4	6	6	6	

Phases in Stage

Stage No.	Phases in Stage
1	A
2	B
3	C
4	D

Give-Way Lane Input Data

Junction: Queniborough Road_Barkby Road
There are no Opposed Lanes in this Junction

Lane Input Data

Junction: Queniborough Road_Barkby Road

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Queniborough Road N)	U	A	2	3	60.0	Geom	-	3.21	0.00	Y	Arm 5 Left	Inf
											Arm 6 Ahead	5.11
											Arm 7 Right	Inf
2/1 (Barkby Road E)	U	D	2	3	60.0	Geom	-	2.19	0.00	Y	Arm 6 Left	5.52
											Arm 7 Ahead	Inf
											Arm 8 Right	9.38
3/1 (Queniborough Road S)	U	B	2	3	60.0	Geom	-	2.95	0.00	Y	Arm 5 Right	Inf
											Arm 7 Left	12.79
											Arm 8 Ahead	Inf
4/1 (Barbky Road W)	U	C	2	3	60.0	Geom	-	3.38	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	13.42
											Arm 8 Left	8.39
5/1	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1	U		2	3	60.0	Inf	-	-	-	-	-	-

Lane Saturation Flows

Scenario 1: '2021 AM' (FG1: '2021 Base AM', Plan 1: 'Network Control Plan 1')

Junction: Queniborough Road_Barkby Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Queniborough Road N)	3.21	0.00	Y	Arm 5 Left	Inf	22.9 %	1647	1647
				Arm 6 Ahead	5.11	59.8 %		
				Arm 7 Right	Inf	17.3 %		
2/1 (Barkby Road E)	2.19	0.00	Y	Arm 6 Left	5.52	0.0 %	1741	1741
				Arm 7 Ahead	Inf	66.7 %		
				Arm 8 Right	9.38	33.3 %		
3/1 (Queniborough Road S)	2.95	0.00	Y	Arm 5 Right	Inf	0.4 %	1814	1814
				Arm 7 Left	12.79	45.3 %		
				Arm 8 Ahead	Inf	54.3 %		
4/1 (Barbky Road W)	3.38	0.00	Y	Arm 5 Ahead	Inf	0.9 %	1719	1719
				Arm 6 Right	13.42	61.0 %		
				Arm 8 Left	8.39	38.0 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2021 PM' (FG2: '2021 Base PM', Plan 1: 'Network Control Plan 1')

Junction: Queniborough Road_Barkby Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Queniborough Road N)	3.21	0.00	Y	Arm 5 Left	Inf	24.7 %	1687	1687
				Arm 6 Ahead	5.11	50.2 %		
				Arm 7 Right	Inf	25.1 %		
2/1 (Barkby Road E)	2.19	0.00	Y	Arm 6 Left	5.52	0.0 %	1730	1730
				Arm 7 Ahead	Inf	62.5 %		
				Arm 8 Right	9.38	37.5 %		
3/1 (Queniborough Road S)	2.95	0.00	Y	Arm 5 Right	Inf	0.7 %	1821	1821
				Arm 7 Left	12.79	41.4 %		
				Arm 8 Ahead	Inf	57.9 %		
4/1 (Barbky Road W)	3.38	0.00	Y	Arm 5 Ahead	Inf	2.0 %	1718	1718
				Arm 6 Right	13.42	57.9 %		
				Arm 8 Left	8.39	40.1 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

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

Junction: Queniborough Road_Barkby Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Queniborough Road N)	3.21	0.00	Y	Arm 5 Left	Inf	22.9 %	1647	1647
				Arm 6 Ahead	5.11	59.8 %		
				Arm 7 Right	Inf	17.3 %		
2/1 (Barkby Road E)	2.19	0.00	Y	Arm 6 Left	5.52	0.0 %	1741	1741
				Arm 7 Ahead	Inf	66.7 %		
				Arm 8 Right	9.38	33.3 %		
3/1 (Queniborough Road S)	2.95	0.00	Y	Arm 5 Right	Inf	0.3 %	1813	1813
				Arm 7 Left	12.79	45.4 %		
				Arm 8 Ahead	Inf	54.3 %		
4/1 (Barbky Road W)	3.38	0.00	Y	Arm 5 Ahead	Inf	0.9 %	1719	1719
				Arm 6 Right	13.42	61.2 %		
				Arm 8 Left	8.39	37.9 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

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

Junction: Queniborough Road_Barkby Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Queniborough Road N)	3.21	0.00	Y	Arm 5 Left	Inf	24.7 %	1687	1687
				Arm 6 Ahead	5.11	50.2 %		
				Arm 7 Right	Inf	25.1 %		
2/1 (Barkby Road E)	2.19	0.00	Y	Arm 6 Left	5.52	0.0 %	1730	1730
				Arm 7 Ahead	Inf	62.5 %		
				Arm 8 Right	9.38	37.5 %		
3/1 (Queniborough Road S)	2.95	0.00	Y	Arm 5 Right	Inf	0.6 %	1821	1821
				Arm 7 Left	12.79	41.6 %		
				Arm 8 Ahead	Inf	57.8 %		
4/1 (Barbky Road W)	3.38	0.00	Y	Arm 5 Ahead	Inf	1.9 %	1718	1718
				Arm 6 Right	13.42	58.1 %		
				Arm 8 Left	8.39	40.0 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2027 + Dev AM' (FG5: '2027 Base+Dev AM', Plan 1: 'Network Control Plan 1')

Junction: Queniborough Road_Barkby Road

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Queniborough Road N)	3.21	0.00	Y	Arm 5 Left	Inf	22.7 %	1649	1649
				Arm 6 Ahead	5.11	59.4 %		
				Arm 7 Right	Inf	17.9 %		
2/1 (Barkby Road E)	2.19	0.00	Y	Arm 6 Left	5.52	0.0 %	1741	1741
				Arm 7 Ahead	Inf	66.7 %		
				Arm 8 Right	9.38	33.3 %		
3/1 (Queniborough Road S)	2.95	0.00	Y	Arm 5 Right	Inf	0.3 %	1808	1808
				Arm 7 Left	12.79	48.2 %		
				Arm 8 Ahead	Inf	51.5 %		
4/1 (Barbky Road W)	3.38	0.00	Y	Arm 5 Ahead	Inf	0.8 %	1722	1722
				Arm 6 Right	13.42	64.4 %		
				Arm 8 Left	8.39	34.8 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2027 + Dev PM' (FG6: '2027 Base+Dev PM', Plan 1: 'Network Control Plan 1')

Junction: Queniborough Road_Barkby Road								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Queniborough Road N)	3.21	0.00	Y	Arm 5 Left	Inf	24.2 %	1692	1692
				Arm 6 Ahead	5.11	49.1 %		
				Arm 7 Right	Inf	26.8 %		
2/1 (Barkby Road E)	2.19	0.00	Y	Arm 6 Left	5.52	0.0 %	1730	1730
				Arm 7 Ahead	Inf	62.5 %		
				Arm 8 Right	9.38	37.5 %		
3/1 (Queniborough Road S)	2.95	0.00	Y	Arm 5 Right	Inf	0.0 %	1811	1811
				Arm 7 Left	12.79	46.8 %		
				Arm 8 Ahead	Inf	53.2 %		
4/1 (Barbky Road W)	3.38	0.00	Y	Arm 5 Ahead	Inf	1.6 %	1721	1721
				Arm 6 Right	13.42	61.0 %		
				Arm 8 Left	8.39	37.4 %		
5/1	Infinite Saturation Flow						Inf	Inf
6/1	Infinite Saturation Flow						Inf	Inf
7/1	Infinite Saturation Flow						Inf	Inf
8/1	Infinite Saturation Flow						Inf	Inf

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2021 Base AM'	08:00	09:00	01:00	
2: '2021 Base PM'	17:00	18:00	01:00	
3: '2027 Base AM'	08:00	09:00	01:00	
4: '2027 Base PM'	17:00	18:00	01:00	
5: '2027 Base+Dev AM'	08:00	09:00	01:00	
6: '2027 Base+Dev PM'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2021 Base AM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	126	151	1	278
	B	130	0	81	2	213
	C	211	61	0	81	353
	D	0	2	1	0	3
	Tot.	341	189	233	84	847

FG2: '2021 Base PM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	126	176	2	304
	B	88	0	61	3	152
	C	124	62	0	61	247
	D	0	5	3	0	8
	Tot.	212	193	240	66	711

FG3: '2027 Base AM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	133	159	1	293
	B	137	0	85	2	224
	C	222	64	0	85	371
	D	0	2	1	0	3
	Tot.	359	199	245	88	891

FG4: '2027 Base PM'

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	133	185	2	320
	B	93	0	64	3	160
	C	130	65	0	64	259
	D	0	5	3	0	8
	Tot.	223	203	252	69	747

FG5: '2027 Base+Dev AM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	149	159	1	309
	B	170	0	92	2	264
	C	222	67	0	85	374
	D	0	2	1	0	3
	Tot.	392	218	252	88	950

FG6: '2027 Base+Dev PM'
Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	163	185	0	348
	B	111	0	68	3	182
	C	130	71	0	64	265
	D	0	5	3	0	8
	Tot.	241	239	256	67	803

Stage Timings

Scenario 1: '2021 AM' (FG1: '2021 Base AM', Plan 1: 'Network Control Plan 1')

Stage	1	2	3	4
Duration	39	28	22	7
Change Point	0	45	79	107

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**64.6%**
Queniborough Road_Barkby Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**64.6%**
1/1	Queniborough Road N Left Ahead Right	U	N/A	N/A	A		1	39	-	353	1647	549	64.3%
2/1	Barkby Road E Left Ahead Right	U	N/A	N/A	D		1	7	-	3	1741	116	2.6%
3/1	Queniborough Road S Right Left Ahead	U	N/A	N/A	B		1	28	-	278	1814	438	63.4%
4/1	Barbky Road W Ahead Right Left	U	N/A	N/A	C		1	22	-	213	1719	329	64.6%
5/1		U	N/A	N/A	-		-	-	-	84	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	341	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	189	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	233	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**9.2**	**2.7**	**0.0**	**11.8**	**-**	**-**	**-**	**-**
Queniborough Road_Barkby Road	**-**	**-**	**0**	**0**	**0**	**9.2**	**2.7**	**0.0**	**11.8**	**-**	**-**	**-**	**-**
1/1	353	353	-	-	-	3.3	0.9	-	4.2	43.0	9.9	0.9	10.8
2/1	3	3	-	-	-	0.0	0.0	-	0.1	68.6	0.1	0.0	0.1
3/1	278	278	-	-	-	3.1	0.9	-	4.0	51.9	8.3	0.9	9.1
4/1	213	213	-	-	-	2.6	0.9	-	3.5	60.0	6.5	0.9	7.4
5/1	84	84	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	341	341	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	189	189	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	233	233	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 39.2 Total Delay for Signalled Lanes (pcuHr): 11.83 Cycle Time (s): 120
PRC Over All Lanes (%): 39.2 Total Delay Over All Lanes(pcuHr): 11.83

Stage Timings

Scenario 2: '2021 PM' (FG2: '2021 Base PM', Plan 1: 'Network Control Plan 1')

Stage	1	2	3	4
Duration	33	37	19	7
Change Point	0	39	82	107

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**53.1%**
Queniborough Road_Barkby Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**53.1%**
1/1	Queniborough Road N Left Ahead Right	U	N/A	N/A	A		1	33	-	247	1687	478	51.7%
2/1	Barkby Road E Left Ahead Right	U	N/A	N/A	D		1	7	-	8	1730	115	6.9%
3/1	Queniborough Road S Right Left Ahead	U	N/A	N/A	B		1	37	-	304	1821	577	52.7%
4/1	Barbky Road W Ahead Right Left	U	N/A	N/A	C		1	19	-	152	1718	286	53.1%
5/1		U	N/A	N/A	-		-	-	-	66	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	212	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	193	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	240	Inf	Inf	0.0%

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Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**7.4**	**1.7**	**0.0**	**9.1**	**-**	**-**	**-**	**-**
Queniborough Road_Barkby Road	**-**	**-**	**0**	**0**	**0**	**7.4**	**1.7**	**0.0**	**9.1**	**-**	**-**	**-**	**-**
1/1	247	247	-	-	-	2.5	0.5	-	3.0	43.9	6.9	0.5	7.4
2/1	8	8	-	-	-	0.1	0.0	-	0.2	69.5	0.2	0.0	0.3
3/1	304	304	-	-	-	2.8	0.6	-	3.4	40.2	8.3	0.6	8.8
4/1	152	152	-	-	-	1.9	0.6	-	2.5	59.0	4.6	0.6	5.2
5/1	66	66	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	212	212	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	193	193	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	240	240	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 69.5 Total Delay for Signalled Lanes (pcuHr): 9.05 Cycle Time (s): 120
PRC Over All Lanes (%): 69.5 Total Delay Over All Lanes(pcuHr): 9.05

Stage Timings

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

Stage	1	2	3	4
Duration	39	28	22	7
Change Point	0	45	79	107

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.0%**
Queniborough Road_Barkby Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**68.0%**
1/1	Queniborough Road N Left Ahead Right	U	N/A	N/A	A		1	39	-	371	1647	549	67.6%
2/1	Barkby Road E Left Ahead Right	U	N/A	N/A	D		1	7	-	3	1741	116	2.6%
3/1	Queniborough Road S Right Left Ahead	U	N/A	N/A	B		1	28	-	293	1813	438	66.9%
4/1	Barbky Road W Ahead Right Left	U	N/A	N/A	C		1	22	-	224	1719	329	68.0%
5/1		U	N/A	N/A	-		-	-	-	88	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	359	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	199	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	245	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**9.7**	**3.1**	**0.0**	**12.8**	**-**	**-**	**-**	**-**
Queniborough Road_Barkby Road	**-**	**-**	**0**	**0**	**0**	**9.7**	**3.1**	**0.0**	**12.8**	**-**	**-**	**-**	**-**
1/1	371	371	-	-	-	3.5	1.0	-	4.6	44.4	10.6	1.0	11.6
2/1	3	3	-	-	-	0.0	0.0	-	0.1	68.6	0.1	0.0	0.1
3/1	293	293	-	-	-	3.4	1.0	-	4.3	53.4	8.8	1.0	9.8
4/1	224	224	-	-	-	2.8	1.0	-	3.8	61.8	6.9	1.0	7.9
5/1	88	88	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	359	359	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	199	199	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	245	245	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 32.4 Total Delay for Signalled Lanes (pcuHr): 12.83 Cycle Time (s): 120
PRC Over All Lanes (%): 32.4 Total Delay Over All Lanes(pcuHr): 12.83

Stage Timings

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

Stage	1	2	3	4
Duration	32	37	20	7
Change Point	0	38	81	107

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**55.8%**
Queniborough Road_Barkby Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**55.8%**
1/1	Queniborough Road N Left Ahead Right	U	N/A	N/A	A		1	32	-	259	1687	464	55.8%
2/1	Barkby Road E Left Ahead Right	U	N/A	N/A	D		1	7	-	8	1730	115	6.9%
3/1	Queniborough Road S Right Left Ahead	U	N/A	N/A	B		1	37	-	320	1821	577	55.5%
4/1	Barbky Road W Ahead Right Left	U	N/A	N/A	C		1	20	-	160	1718	301	53.2%
5/1		U	N/A	N/A	-		-	-	-	69	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	223	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	203	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	252	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**7.8**	**1.9**	**0.0**	**9.7**	**-**	**-**	**-**	**-**
Queniborough Road_Barkby Road	**-**	**-**	**0**	**0**	**0**	**7.8**	**1.9**	**0.0**	**9.7**	**-**	**-**	**-**	**-**
1/1	259	259	-	-	-	2.7	0.6	-	3.3	46.0	7.3	0.6	8.0
2/1	8	8	-	-	-	0.1	0.0	-	0.2	69.5	0.2	0.0	0.3
3/1	320	320	-	-	-	3.0	0.6	-	3.6	41.0	8.8	0.6	9.4
4/1	160	160	-	-	-	2.0	0.6	-	2.6	57.7	4.8	0.6	5.4
5/1	69	69	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	223	223	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	203	203	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	252	252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 61.2 Total Delay for Signalled Lanes (pcuHr): 9.67 Cycle Time (s): 120
PRC Over All Lanes (%): 61.2 Total Delay Over All Lanes(pcuHr): 9.67

Stage Timings

Scenario 5: '2027 + Dev AM' (FG5: '2027 Base+Dev AM', Plan 1: 'Network Control Plan 1')

Stage	1	2	3	4
Duration	37	27	25	7
Change Point	0	43	76	107

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**73.2%**
Queniborough Road_Barkby Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**73.2%**
1/1	Queniborough Road N Left Ahead Right	U	N/A	N/A	A		1	37	-	374	1649	522	71.6%
2/1	Barkby Road E Left Ahead Right	U	N/A	N/A	D		1	7	-	3	1741	116	2.6%
3/1	Queniborough Road S Right Left Ahead	U	N/A	N/A	B		1	27	-	309	1808	422	73.2%
4/1	Barbky Road W Ahead Right Left	U	N/A	N/A	C		1	25	-	264	1722	373	70.8%
5/1		U	N/A	N/A	-		-	-	-	88	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	392	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	218	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	252	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**10.6**	**3.8**	**0.0**	**14.4**	**-**	**-**	**-**	**-**
Queniborough Road_Barkby Road	**-**	**-**	**0**	**0**	**0**	**10.6**	**3.8**	**0.0**	**14.4**	**-**	**-**	**-**	**-**
1/1	374	374	-	-	-	3.8	1.2	-	5.0	48.2	11.0	1.2	12.3
2/1	3	3	-	-	-	0.0	0.0	-	0.1	68.6	0.1	0.0	0.1
3/1	309	309	-	-	-	3.7	1.3	-	5.0	58.1	9.4	1.3	10.8
4/1	264	264	-	-	-	3.2	1.2	-	4.4	59.6	8.1	1.2	9.3
5/1	88	88	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	392	392	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	218	218	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	252	252	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 22.9 Total Delay for Signalled Lanes (pcuHr): 14.42 Cycle Time (s): 120
PRC Over All Lanes (%): 22.9 Total Delay Over All Lanes(pcuHr): 14.42

Stage Timings

Scenario 6: '2027 + Dev PM' (FG6: '2027 Base+Dev PM', Plan 1: 'Network Control Plan 1')

Stage	1	2	3	4
Duration	31	38	20	7
Change Point	0	37	81	107

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**60.4%**
Queniborough Road_Barkby Road	-	-	**N/A**	-	-		-	-	-	-	-	-	**60.4%**
1/1	Queniborough Road N Left Ahead Right	U	N/A	N/A	A		1	31	-	265	1692	451	58.7%
2/1	Barkby Road E Left Ahead Right	U	N/A	N/A	D		1	7	-	8	1730	115	6.9%
3/1	Queniborough Road S Right Left Ahead	U	N/A	N/A	B		1	38	-	348	1811	589	59.1%
4/1	Barbky Road W Ahead Right Left	U	N/A	N/A	C		1	20	-	182	1721	301	60.4%
5/1		U	N/A	N/A	-		-	-	-	67	Inf	Inf	0.0%
6/1		U	N/A	N/A	-		-	-	-	241	Inf	Inf	0.0%
7/1		U	N/A	N/A	-		-	-	-	239	Inf	Inf	0.0%
8/1		U	N/A	N/A	-		-	-	-	256	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	**-**	**-**	**0**	**0**	**0**	**8.5**	**2.2**	**0.0**	**10.7**	**-**	**-**	**-**	**-**
Queniborough Road_Barkby Road	**-**	**-**	**0**	**0**	**0**	**8.5**	**2.2**	**0.0**	**10.7**	**-**	**-**	**-**	**-**
1/1	265	265	-	-	-	2.8	0.7	-	3.5	47.9	7.7	0.7	8.4
2/1	8	8	-	-	-	0.1	0.0	-	0.2	69.5	0.2	0.0	0.3
3/1	348	348	-	-	-	3.3	0.7	-	4.0	41.3	9.7	0.7	10.4
4/1	182	182	-	-	-	2.3	0.8	-	3.1	60.6	5.6	0.8	6.3
5/1	67	67	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	241	241	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	239	239	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	256	256	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 48.9 Total Delay for Signalled Lanes (pcuHr): 10.73 Cycle Time (s): 120
PRC Over All Lanes (%): 48.9 Total Delay Over All Lanes(pcuHr): 10.73

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.4.1693

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

Filename: Barkby Road - Pembroke Avenue T Junction Assessment.j10
Path: P:\20000's\20060\Technical\Junction Modelling\2022 Junction Assessments
Report generation date: 17/06/2022 13:39:14

Summary of junction performance

	AM			PM		
	Q (PCU)	Delay (s)	RFC	Q (PCU)	Delay (s)	RFC
	2022					
Stream B-C	0.1	6.65	0.06	0.1	7.29	0.06
Stream B-A	0.2	10.13	0.17	0.4	11.96	0.31
Stream C-AB	0.2	6.36	0.13	0.2	5.65	0.10
	2027					
Stream B-C	0.1	6.73	0.07	0.1	7.42	0.06
Stream B-A	0.2	10.36	0.18	0.5	12.42	0.32
Stream C-AB	0.2	6.39	0.14	0.2	5.66	0.11
	2027 + Dev					
Stream B-C	0.1	7.07	0.07	0.1	7.97	0.07
Stream B-A	0.3	11.24	0.22	0.6	14.23	0.40
Stream C-AB	0.2	6.44	0.14	0.2	5.57	0.11

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

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	04/10/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DTA\Arcady
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓
D3	2027	AM	ONE HOUR	07:45	09:15	15	✓
D4	2027	PM	ONE HOUR	16:45	18:15	15	✓
D5	2027 + Dev	AM	ONE HOUR	07:45	09:15	15	✓
D6	2027 + Dev	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

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pembroke Avenue - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.00	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.00	A

Arms

Arms

Arm	Name	Description	Arm type
A	Barkby Road (S)		Major
B	Pembroke Avenue		Minor
C	Barkby Road (N)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C - Barkby Road (N)	6.60			99.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B - Pembroke Avenue	One lane plus flare	10.00	6.00	3.10	3.10	3.10	✓	1.00	54	41

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	549	0.097	0.246	0.155	0.352
B-C	684	0.102	0.258	-	-
C-B	631	0.238	0.238	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Barkby Road (S)		ONE HOUR	✓	364	100.000
B - Pembroke Avenue		ONE HOUR	✓	97	100.000
C - Barkby Road (N)		ONE HOUR	✓	209	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Barkby Road (S)	B - Pembroke Avenue	C - Barkby Road (N)
From	A - Barkby Road (S)	0	148	216
	B - Pembroke Avenue	64	0	33
	C - Barkby Road (N)	151	58	0

Vehicle Mix

HV %s

		To		
		A - Barkby Road (S)	B - Pembroke Avenue	C - Barkby Road (N)
From	A - Barkby Road (S)	0	0	0
	B - Pembroke Avenue	0	0	0
	C - Barkby Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	6.65	0.1	A	30	45
B-A	0.17	10.13	0.2	B	59	88
C-AB	0.13	6.36	0.2	A	68	103
C-A					123	185
A-B					136	204
A-C					198	297

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	613	0.041	25	0.0	0.0	6.113	A
B-A	48	12	465	0.104	48	0.0	0.1	8.616	A
C-AB	53	13	644	0.082	53	0.0	0.1	6.084	A
C-A	104	26			104				
A-B	111	28			111				
A-C	163	41			163				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	7	599	0.050	30	0.0	0.1	6.325	A
B-A	58	14	449	0.128	57	0.1	0.1	9.199	A
C-AB	66	17	647	0.102	66	0.1	0.1	6.191	A
C-A	122	30			122				
A-B	133	33			133				
A-C	194	49			194				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	578	0.063	36	0.1	0.1	6.646	A
B-A	70	18	426	0.165	70	0.1	0.2	10.117	B
C-AB	86	21	653	0.132	86	0.1	0.2	6.350	A
C-A	144	36			144				
A-B	163	41			163				
A-C	238	59			238				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	36	9	578	0.063	36	0.1	0.1	6.647	A
B-A	70	18	426	0.165	70	0.2	0.2	10.127	B
C-AB	86	21	653	0.132	86	0.2	0.2	6.357	A
C-A	144	36			144				
A-B	163	41			163				
A-C	238	59			238				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	30	7	598	0.050	30	0.1	0.1	6.332	A
B-A	58	14	449	0.128	58	0.2	0.1	9.217	A
C-AB	66	17	648	0.102	66	0.2	0.1	6.201	A
C-A	122	30			122				
A-B	133	33			133				
A-C	194	49			194				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	25	6	613	0.041	25	0.1	0.0	6.123	A
B-A	48	12	465	0.104	48	0.1	0.1	8.645	A
C-AB	53	13	644	0.082	53	0.1	0.1	6.098	A
C-A	104	26			104				
A-B	111	28			111				
A-C	163	41			163				

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pembroke Avenue - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.93	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.93	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Barkby Road (S)		ONE HOUR	✓	289	100.000
B - Pembroke Avenue		ONE HOUR	✓	150	100.000
C - Barkby Road (N)		ONE HOUR	✓	251	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Barkby Road (S)	B - Pembroke Avenue	C - Barkby Road (N)
From	A - Barkby Road (S)	0	59	230
	B - Pembroke Avenue	121	0	29
	C - Barkby Road (N)	205	46	0

Vehicle Mix

HV %s

		To		
		A - Barkby Road (S)	B - Pembroke Avenue	C - Barkby Road (N)
From	A - Barkby Road (S)	0	0	0
	B - Pembroke Avenue	0	0	0
	C - Barkby Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	7.29	0.1	A	27	40
B-A	0.31	11.96	0.4	B	111	167
C-AB	0.10	5.65	0.2	A	59	88
C-A					172	258
A-B					54	81
A-C					211	317

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	5	575	0.038	22	0.0	0.0	6.505	A
B-A	91	23	474	0.192	90	0.0	0.2	9.368	A
C-AB	45	11	684	0.065	44	0.0	0.1	5.625	A
C-A	144	36			144				
A-B	44	11			44				
A-C	173	43			173				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	7	556	0.047	26	0.0	0.0	6.795	A
B-A	109	27	457	0.238	108	0.2	0.3	10.322	B
C-AB	56	14	695	0.081	56	0.1	0.1	5.633	A
C-A	169	42			169				
A-B	53	13			53				
A-C	207	52			207				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	526	0.061	32	0.0	0.1	7.280	A
B-A	133	33	434	0.307	133	0.3	0.4	11.925	B
C-AB	74	19	712	0.104	74	0.1	0.2	5.651	A
C-A	202	51			202				
A-B	65	16			65				
A-C	253	63			253				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	32	8	526	0.061	32	0.1	0.1	7.286	A
B-A	133	33	434	0.307	133	0.4	0.4	11.964	B
C-AB	74	19	712	0.105	74	0.2	0.2	5.654	A
C-A	202	50			202				
A-B	65	16			65				
A-C	253	63			253				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	7	555	0.047	26	0.1	0.0	6.806	A
B-A	109	27	457	0.238	109	0.4	0.3	10.371	B
C-AB	56	14	696	0.081	57	0.2	0.1	5.640	A
C-A	169	42			169				
A-B	53	13			53				
A-C	207	52			207				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	22	5	574	0.038	22	0.0	0.0	6.517	A
B-A	91	23	473	0.192	91	0.3	0.2	9.430	A
C-AB	45	11	684	0.066	45	0.1	0.1	5.633	A
C-A	144	36			144				
A-B	44	11			44				
A-C	173	43			173				

2027, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pembroke Avenue - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.04	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.04	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2027	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Barkby Road (S)		ONE HOUR	✓	379	100.000
B - Pembroke Avenue		ONE HOUR	✓	101	100.000
C - Barkby Road (N)		ONE HOUR	✓	217	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Barkby Road (S)	B - Pembroke Avenue	C - Barkby Road (N)
From	A - Barkby Road (S)	0	154	225
	B - Pembroke Avenue	67	0	34
	C - Barkby Road (N)	157	60	0

Vehicle Mix

HV %s

		To		
		A - Barkby Road (S)	B - Pembroke Avenue	C - Barkby Road (N)
From	A - Barkby Road (S)	0	0	0
	B - Pembroke Avenue	0	0	0
	C - Barkby Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.07	6.73	0.1	A	31	47
B-A	0.18	10.36	0.2	B	61	92
C-AB	0.14	6.39	0.2	A	71	107
C-A					128	191
A-B					141	212
A-C					206	310

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	6	610	0.042	25	0.0	0.0	6.161	A
B-A	50	13	462	0.109	50	0.0	0.1	8.732	A
C-AB	55	14	645	0.086	55	0.0	0.1	6.101	A
C-A	108	27			108				
A-B	116	29			116				
A-C	169	42			169				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	594	0.051	31	0.0	0.1	6.386	A
B-A	60	15	445	0.135	60	0.1	0.2	9.355	A
C-AB	69	17	648	0.107	69	0.1	0.2	6.215	A
C-A	126	32			126				
A-B	138	35			138				
A-C	202	51			202				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	9	572	0.065	37	0.1	0.1	6.729	A
B-A	74	18	421	0.175	74	0.2	0.2	10.348	B
C-AB	90	22	654	0.138	90	0.2	0.2	6.384	A
C-A	149	37			149				
A-B	170	42			170				
A-C	248	62			248				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	9	572	0.065	37	0.1	0.1	6.731	A
B-A	74	18	421	0.175	74	0.2	0.2	10.362	B
C-AB	90	23	654	0.138	90	0.2	0.2	6.389	A
C-A	149	37			149				
A-B	170	42			170				
A-C	248	62			248				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	594	0.051	31	0.1	0.1	6.390	A
B-A	60	15	445	0.135	60	0.2	0.2	9.373	A
C-AB	69	17	648	0.107	69	0.2	0.2	6.223	A
C-A	126	31			126				
A-B	138	35			138				
A-C	202	51			202				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	6	609	0.042	26	0.1	0.0	6.168	A
B-A	50	13	462	0.109	51	0.2	0.1	8.758	A
C-AB	55	14	645	0.086	56	0.2	0.1	6.116	A
C-A	108	27			108				
A-B	116	29			116				
A-C	169	42			169				

2027, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pembroke Avenue - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.01	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.01	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2027	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Barkby Road (S)		ONE HOUR	✓	302	100.000
B - Pembroke Avenue		ONE HOUR	✓	156	100.000
C - Barkby Road (N)		ONE HOUR	✓	262	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Barkby Road (S)	B - Pembroke Avenue	C - Barkby Road (N)
From	A - Barkby Road (S)	0	62	240
	B - Pembroke Avenue	126	0	30
	C - Barkby Road (N)	214	48	0

Vehicle Mix

HV %s

		To		
		A - Barkby Road (S)	B - Pembroke Avenue	C - Barkby Road (N)
From	A - Barkby Road (S)	0	0	0
	B - Pembroke Avenue	0	0	0
	C - Barkby Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.06	7.42	0.1	A	28	41
B-A	0.32	12.42	0.5	B	116	173
C-AB	0.11	5.66	0.2	A	62	93
C-A					178	268
A-B					57	85
A-C					220	330

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	6	571	0.040	22	0.0	0.0	6.563	A
B-A	95	24	470	0.202	94	0.0	0.2	9.550	A
C-AB	47	12	687	0.069	47	0.0	0.1	5.625	A
C-A	150	38			150				
A-B	47	12			47				
A-C	181	45			181				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	7	550	0.049	27	0.0	0.1	6.877	A
B-A	113	28	453	0.250	113	0.2	0.3	10.591	B
C-AB	60	15	699	0.085	60	0.1	0.1	5.637	A
C-A	176	44			176				
A-B	56	14			56				
A-C	216	54			216				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	519	0.064	33	0.1	0.1	7.413	A
B-A	139	35	429	0.324	138	0.3	0.5	12.368	B
C-AB	79	20	716	0.110	79	0.1	0.2	5.657	A
C-A	209	52			209				
A-B	68	17			68				
A-C	264	66			264				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	518	0.064	33	0.1	0.1	7.420	A
B-A	139	35	429	0.324	139	0.5	0.5	12.416	B
C-AB	79	20	716	0.110	79	0.2	0.2	5.659	A
C-A	209	52			209				
A-B	68	17			68				
A-C	264	66			264				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	7	550	0.049	27	0.1	0.1	6.889	A
B-A	113	28	452	0.250	114	0.5	0.3	10.648	B
C-AB	60	15	699	0.086	60	0.2	0.1	5.643	A
C-A	176	44			176				
A-B	56	14			56				
A-C	216	54			216				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	6	570	0.040	23	0.1	0.0	6.578	A
B-A	95	24	470	0.202	95	0.3	0.3	9.621	A
C-AB	47	12	687	0.069	47	0.1	0.1	5.634	A
C-A	150	37			150				
A-B	47	12			47				
A-C	181	45			181				

2027 + Dev, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pembroke Avenue - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		2.11	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	2.11	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2027 + Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Barkby Road (S)		ONE HOUR	✓	437	100.000
B - Pembroke Avenue		ONE HOUR	✓	114	100.000
C - Barkby Road (N)		ONE HOUR	✓	234	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Barkby Road (S)	B - Pembroke Avenue	C - Barkby Road (N)
From	A - Barkby Road (S)	0	180	257
	B - Pembroke Avenue	80	0	34
	C - Barkby Road (N)	174	60	0

Vehicle Mix

HV %s

		To		
		A - Barkby Road (S)	B - Pembroke Avenue	C - Barkby Road (N)
From	A - Barkby Road (S)	0	0	0
	B - Pembroke Avenue	0	0	0
	C - Barkby Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.07	7.07	0.1	A	31	47
B-A	0.22	11.24	0.3	B	73	110
C-AB	0.14	6.44	0.2	A	74	111
C-A					141	211
A-B					165	248
A-C					236	354

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	6	591	0.043	25	0.0	0.0	6.364	A
B-A	60	15	454	0.133	60	0.0	0.2	9.114	A
C-AB	57	14	644	0.088	56	0.0	0.1	6.125	A
C-A	119	30			119				
A-B	136	34			136				
A-C	193	48			193				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	573	0.053	31	0.0	0.1	6.638	A
B-A	72	18	435	0.165	72	0.2	0.2	9.907	A
C-AB	71	18	647	0.110	71	0.1	0.2	6.246	A
C-A	139	35			139				
A-B	162	40			162				
A-C	231	58			231				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	9	547	0.068	37	0.1	0.1	7.070	A
B-A	88	22	409	0.216	88	0.2	0.3	11.214	B
C-AB	94	23	653	0.143	93	0.2	0.2	6.431	A
C-A	164	41			164				
A-B	198	50			198				
A-C	283	71			283				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	37	9	546	0.069	37	0.1	0.1	7.073	A
B-A	88	22	408	0.216	88	0.3	0.3	11.236	B
C-AB	94	23	653	0.143	94	0.2	0.2	6.439	A
C-A	164	41			164				
A-B	198	50			198				
A-C	283	71			283				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	31	8	572	0.053	31	0.1	0.1	6.646	A
B-A	72	18	435	0.165	72	0.3	0.2	9.936	A
C-AB	71	18	648	0.110	72	0.2	0.2	6.255	A
C-A	139	35			139				
A-B	162	40			162				
A-C	231	58			231				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	26	6	590	0.043	26	0.1	0.0	6.373	A
B-A	60	15	454	0.133	60	0.2	0.2	9.153	A
C-AB	57	14	644	0.088	57	0.2	0.1	6.141	A
C-A	119	30			119				
A-B	136	34			136				
A-C	193	48			193				

2027 + Dev, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	B - Pembroke Avenue - Minor arm geometry	Visibility to right expected to have two components if the arm has two lanes, or two lanes in a flared section.
Warning	Vehicle Mix		HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		3.44	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	3.44	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2027 + Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A - Barkby Road (S)		ONE HOUR	✓	334	100.000
B - Pembroke Avenue		ONE HOUR	✓	180	100.000
C - Barkby Road (N)		ONE HOUR	✓	291	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A - Barkby Road (S)	B - Pembroke Avenue	C - Barkby Road (N)
From	A - Barkby Road (S)	0	76	258
	B - Pembroke Avenue	150	0	30
	C - Barkby Road (N)	243	48	0

Vehicle Mix

HV %s

		To		
		A - Barkby Road (S)	B - Pembroke Avenue	C - Barkby Road (N)
From	A - Barkby Road (S)	0	0	0
	B - Pembroke Avenue	0	0	0
	C - Barkby Road (N)	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.07	7.97	0.1	A	28	41
B-A	0.40	14.23	0.6	B	138	206
C-AB	0.11	5.57	0.2	A	65	98
C-A					202	303
A-B					70	105
A-C					237	355

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	6	553	0.041	22	0.0	0.0	6.784	A
B-A	113	28	463	0.244	112	0.0	0.3	10.202	B
C-AB	49	12	696	0.070	49	0.0	0.1	5.557	A
C-A	170	43			170				
A-B	57	14			57				
A-C	194	49			194				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	7	527	0.051	27	0.0	0.1	7.192	A
B-A	135	34	444	0.303	134	0.3	0.4	11.597	B
C-AB	62	16	710	0.088	62	0.1	0.1	5.556	A
C-A	199	50			199				
A-B	68	17			68				
A-C	232	58			232				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	486	0.068	33	0.1	0.1	7.951	A
B-A	165	41	418	0.395	164	0.4	0.6	14.135	B
C-AB	84	21	731	0.114	83	0.1	0.2	5.567	A
C-A	237	59			237				
A-B	84	21			84				
A-C	284	71			284				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	33	8	485	0.068	33	0.1	0.1	7.965	A
B-A	165	41	418	0.395	165	0.6	0.6	14.227	B
C-AB	84	21	731	0.115	84	0.2	0.2	5.571	A
C-A	237	59			237				
A-B	84	21			84				
A-C	284	71			284				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	27	7	527	0.051	27	0.1	0.1	7.207	A
B-A	135	34	444	0.304	136	0.6	0.4	11.699	B
C-AB	63	16	710	0.088	63	0.2	0.1	5.565	A
C-A	199	50			199				
A-B	68	17			68				
A-C	232	58			232				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	23	6	552	0.041	23	0.1	0.0	6.802	A
B-A	113	28	463	0.244	113	0.4	0.3	10.307	B
C-AB	49	12	696	0.071	49	0.1	0.1	5.566	A
C-A	170	42			170				
A-B	57	14			57				
A-C	194	49			194				

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.4.1693

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Filename: Melton - Goodes Assessment RevA.j10
Path: P:\20000's\20060\Technical\Junction Modelling\2022 Junction Assessments
Report generation date: 17/06/2022 13:40:57

Summary of junction performance

	AM			PM		
	Q (PCU)	Delay (s)	RFC	Q (PCU)	Delay (s)	RFC
	2022					
Stream B-C	1.8	19.78	0.64	0.4	9.93	0.29
Stream B-A	0.2	19.08	0.17	0.1	16.76	0.08
Stream C-AB	1.1	7.50	0.39	5.3	19.67	0.77
	2027					
Stream B-C	2.1	22.59	0.68	0.4	10.33	0.31
Stream B-A	0.3	21.92	0.20	0.1	18.14	0.09
Stream C-AB	1.3	7.79	0.42	7.4	26.32	0.83
	2027 + Development					
Stream B-C	2.8	27.59	0.74	0.5	10.88	0.34
Stream B-A	0.3	26.44	0.23	0.1	19.58	0.10
Stream C-AB	1.5	8.38	0.46	13.0	47.79	0.92

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

File summary

File Description

Title	(untitled)
Location	
Site number	
Date	11/04/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	DTA\Arcady
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)	Use iterations with HCM roundabouts	Max number of iterations for roundabouts
5.75						0.85	36.00	20.00		500

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓
D5	2027	AM	ONE HOUR	07:45	09:15	15	✓
D6	2027	PM	ONE HOUR	16:45	18:15	15	✓
D7	2027 + Development	AM	ONE HOUR	07:45	09:15	15	✓
D8	2027 + Development	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

2022, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.09	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.09	A

Arms

Arms

Arm	Name	Description	Arm type
A	Melton Road N		Major
B	Goodes Lane		Minor
C	Melton Road S		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	7.43			114.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	4.26	2.98	2.94	2.89		1.00	53	23

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	607	0.104	0.262	0.165	0.375
B-C	678	0.097	0.246	-	-
C-B	640	0.233	0.233	-	-

The slopes and intercepts shown above include custom intercept adjustments only.

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2022	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	532	100.000
B		ONE HOUR	✓	339	100.000
C		ONE HOUR	✓	551	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	24	508
	B	38	0	301
	C	418	133	0

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.64	19.78	1.8	C	276	414
B-A	0.17	19.08	0.2	C	35	52
C-AB	0.39	7.50	1.1	A	242	364
C-A					263	395
A-B					22	33
A-C					466	699

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	227	57	571	0.397	224	0.0	0.7	10.410	B
B-A	29	7	392	0.073	28	0.0	0.1	10.670	B
C-AB	170	42	766	0.222	168	0.0	0.5	6.305	A
C-A	245	61			245				
A-B	18	5			18				
A-C	382	96			382				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	271	68	548	0.494	269	0.7	1.0	12.983	B
B-A	34	9	336	0.102	34	0.1	0.1	12.851	B
C-AB	228	57	795	0.287	227	0.5	0.7	6.666	A
C-A	267	67			267				
A-B	22	5			22				
A-C	457	114			457				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	331	83	515	0.644	328	1.0	1.7	19.176	C
B-A	42	10	248	0.169	41	0.1	0.2	18.776	C
C-AB	328	82	836	0.392	326	0.7	1.1	7.438	A
C-A	279	70			279				
A-B	26	7			26				
A-C	559	140			559				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	331	83	515	0.644	331	1.7	1.8	19.780	C
B-A	42	10	246	0.170	42	0.2	0.2	19.076	C
C-AB	329	82	837	0.393	329	1.1	1.1	7.501	A
C-A	278	69			278				
A-B	26	7			26				
A-C	559	140			559				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	271	68	548	0.494	274	1.8	1.0	13.401	B
B-A	34	9	334	0.102	35	0.2	0.1	13.015	B
C-AB	229	57	796	0.288	231	1.1	0.7	6.740	A
C-A	266	67			266				
A-B	22	5			22				
A-C	457	114			457				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	227	57	570	0.397	228	1.0	0.7	10.657	B
B-A	29	7	390	0.073	29	0.1	0.1	10.760	B
C-AB	171	43	767	0.223	172	0.7	0.5	6.371	A
C-A	244	61			244				
A-B	18	5			18				
A-C	382	96			382				

2022, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		8.34	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.34	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2022	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	582	100.000
B		ONE HOUR	✓	156	100.000
C		ONE HOUR	✓	713	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	54	528
	B	19	0	137
	C	472	241	0

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.29	9.93	0.4	A	126	189
B-A	0.08	16.76	0.1	C	17	26
C-AB	0.77	19.67	5.3	C	487	730
C-A					168	252
A-B					50	74
A-C					485	727

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	103	26	570	0.181	102	0.0	0.2	7.756	A
B-A	14	4	370	0.039	14	0.0	0.0	10.911	B
C-AB	331	83	787	0.420	326	0.0	1.1	8.166	A
C-A	206	52			206				
A-B	41	10			41				
A-C	398	99			398				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	123	31	548	0.225	123	0.2	0.3	8.540	A
B-A	17	4	322	0.053	17	0.0	0.1	12.741	B
C-AB	452	113	822	0.550	448	1.1	1.9	10.164	B
C-A	189	47			189				
A-B	49	12			49				
A-C	475	119			475				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	38	517	0.292	150	0.3	0.4	9.900	A
B-A	21	5	256	0.082	21	0.1	0.1	16.539	C
C-AB	667	167	872	0.765	655	1.9	4.9	17.548	C
C-A	118	30			118				
A-B	59	15			59				
A-C	581	145			581				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	151	38	517	0.292	151	0.4	0.4	9.931	A
B-A	21	5	253	0.083	21	0.1	0.1	16.761	C
C-AB	676	169	878	0.770	674	4.9	5.3	19.666	C
C-A	109	27			109				
A-B	59	15			59				
A-C	581	145			581				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	123	31	548	0.225	124	0.4	0.3	8.575	A
B-A	17	4	318	0.054	17	0.1	0.1	12.928	B
C-AB	460	115	830	0.554	473	5.3	2.1	11.164	B
C-A	181	45			181				
A-B	49	12			49				
A-C	475	119			475				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	103	26	570	0.181	103	0.3	0.2	7.797	A
B-A	14	4	368	0.039	14	0.1	0.0	10.994	B
C-AB	334	84	790	0.423	338	2.1	1.2	8.488	A
C-A	202	51			202				
A-B	41	10			41				
A-C	398	99			398				

2027, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		6.87	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.87	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D5	2027	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	555	100.000
B		ONE HOUR	✓	354	100.000
C		ONE HOUR	✓	575	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	25	530
	B	40	0	314
	C	436	139	0

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.68	22.59	2.1	C	288	432
B-A	0.20	21.92	0.3	C	37	55
C-AB	0.42	7.79	1.3	A	262	393
C-A					266	398
A-B					23	34
A-C					486	730

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	236	59	566	0.418	234	0.0	0.7	10.856	B
B-A	30	8	381	0.079	30	0.0	0.1	11.067	B
C-AB	182	46	772	0.236	180	0.0	0.5	6.370	A
C-A	251	63			251				
A-B	19	5			19				
A-C	399	100			399				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	282	71	542	0.521	281	0.7	1.1	13.854	B
B-A	36	9	320	0.112	36	0.1	0.1	13.647	B
C-AB	246	61	802	0.306	245	0.5	0.7	6.786	A
C-A	271	68			271				
A-B	22	6			22				
A-C	476	119			476				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	346	86	506	0.683	342	1.1	2.0	21.635	C
B-A	44	11	225	0.196	44	0.1	0.3	21.395	C
C-AB	356	89	846	0.421	354	0.7	1.3	7.718	A
C-A	277	69			277				
A-B	28	7			28				
A-C	584	146			584				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	346	86	506	0.684	345	2.0	2.1	22.594	C
B-A	44	11	221	0.199	44	0.3	0.3	21.917	C
C-AB	358	89	847	0.422	358	1.3	1.3	7.793	A
C-A	275	69			275				
A-B	28	7			28				
A-C	584	146			584				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	282	71	541	0.521	286	2.1	1.1	14.453	B
B-A	36	9	317	0.113	36	0.3	0.1	13.887	B
C-AB	247	62	804	0.307	249	1.3	0.8	6.875	A
C-A	270	68			270				
A-B	22	6			22				
A-C	476	119			476				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	236	59	565	0.418	238	1.1	0.7	11.158	B
B-A	30	8	378	0.080	30	0.1	0.1	11.178	B
C-AB	183	46	773	0.237	184	0.8	0.5	6.445	A
C-A	250	62			250				
A-B	19	5			19				
A-C	399	100			399				

2027, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		11.23	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.23	B

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D6	2027	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	606	100.000
B		ONE HOUR	✓	163	100.000
C		ONE HOUR	✓	743	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	56	550
	B	20	0	143
	C	492	251	0

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.31	10.33	0.4	B	131	197
B-A	0.09	18.14	0.1	C	18	28
C-AB	0.83	26.32	7.4	D	528	791
C-A					154	231
A-B					51	77
A-C					505	757

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	108	27	565	0.190	107	0.0	0.2	7.910	A
B-A	15	4	360	0.042	15	0.0	0.0	11.251	B
C-AB	354	89	794	0.446	349	0.0	1.2	8.452	A
C-A	205	51			205				
A-B	42	11			42				
A-C	414	104			414				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	32	543	0.237	128	0.2	0.3	8.768	A
B-A	18	4	310	0.058	18	0.0	0.1	13.316	B
C-AB	487	122	831	0.586	483	1.2	2.2	10.916	B
C-A	181	45			181				
A-B	50	13			50				
A-C	494	124			494				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	157	39	510	0.309	157	0.3	0.4	10.294	B
B-A	22	6	240	0.092	22	0.1	0.1	17.780	C
C-AB	726	182	884	0.822	709	2.2	6.6	21.674	C
C-A	92	23			92				
A-B	62	15			62				
A-C	606	151			606				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	157	39	509	0.309	157	0.4	0.4	10.334	B
B-A	22	6	236	0.093	22	0.1	0.1	18.142	C
C-AB	740	185	892	0.829	737	6.6	7.4	26.325	D
C-A	78	20			78				
A-B	62	15			62				
A-C	606	151			606				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	129	32	542	0.237	129	0.4	0.3	8.808	A
B-A	18	4	304	0.059	18	0.1	0.1	13.610	B
C-AB	500	125	843	0.593	519	7.4	2.5	12.670	B
C-A	168	42			168				
A-B	50	13			50				
A-C	494	124			494				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	108	27	565	0.190	108	0.3	0.2	7.956	A
B-A	15	4	358	0.042	15	0.1	0.0	11.355	B
C-AB	359	90	798	0.449	363	2.5	1.3	8.863	A
C-A	201	50			201				
A-B	42	11			42				
A-C	414	104			414				

2027 + Development, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		8.57	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.57	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D7	2027 + Development	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	555	100.000
B		ONE HOUR	✓	380	100.000
C		ONE HOUR	✓	588	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	25	530
	B	40	0	340
	C	436	152	0

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.74	27.59	2.8	D	312	468
B-A	0.23	26.44	0.3	D	37	55
C-AB	0.46	8.38	1.5	A	287	430
C-A					253	379
A-B					23	34
A-C					486	730

Main Results for each time segment

07:45 - 08:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	256	64	565	0.453	253	0.0	0.8	11.510	B
B-A	30	8	370	0.081	30	0.0	0.1	11.412	B
C-AB	199	50	772	0.258	197	0.0	0.6	6.555	A
C-A	244	61			244				
A-B	19	5			19				
A-C	399	100			399				

08:00 - 08:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	306	76	541	0.565	304	0.8	1.3	15.189	C
B-A	36	9	304	0.118	36	0.1	0.1	14.504	B
C-AB	269	67	802	0.335	268	0.6	0.8	7.074	A
C-A	260	65			260				
A-B	22	6			22				
A-C	476	119			476				

08:15 - 08:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	374	94	505	0.741	369	1.3	2.6	25.742	D
B-A	44	11	196	0.224	43	0.1	0.3	25.312	D
C-AB	390	97	846	0.461	387	0.8	1.5	8.274	A
C-A	258	64			258				
A-B	28	7			28				
A-C	584	146			584				

08:30 - 08:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	374	94	504	0.742	374	2.6	2.8	27.591	D
B-A	44	11	191	0.231	44	0.3	0.3	26.441	D
C-AB	391	98	848	0.462	391	1.5	1.5	8.376	A
C-A	256	64			256				
A-B	28	7			28				
A-C	584	146			584				

08:45 - 09:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	306	76	541	0.565	311	2.8	1.4	16.197	C
B-A	36	9	298	0.121	37	0.3	0.2	14.904	B
C-AB	270	68	804	0.336	273	1.5	0.9	7.186	A
C-A	258	65			258				
A-B	22	6			22				
A-C	476	119			476				

09:00 - 09:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	256	64	565	0.453	258	1.4	0.9	11.915	B
B-A	30	8	367	0.082	30	0.2	0.1	11.557	B
C-AB	200	50	773	0.259	202	0.9	0.6	6.643	A
C-A	242	61			242				
A-B	19	5			19				
A-C	399	100			399				

2027 + Development, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	untitled	T-Junction	Two-way	Two-way	Two-way		20.97	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	20.97	C

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D8	2027 + Development	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	606	100.000
B		ONE HOUR	✓	178	100.000
C		ONE HOUR	✓	768	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	56	550
	B	20	0	158
	C	492	276	0

Vehicle Mix

HV %s

		To		
		A	B	C
From	A	0	3	4
	B	8	0	1
	C	6	4	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.34	10.88	0.5	B	145	217
B-A	0.10	19.58	0.1	C	18	28
C-AB	0.92	47.79	13.0	E	584	877
C-A					120	180
A-B					51	77
A-C					505	757

Main Results for each time segment

16:45 - 17:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	119	30	565	0.210	118	0.0	0.3	8.101	A
B-A	15	4	352	0.043	15	0.0	0.0	11.510	B
C-AB	389	97	794	0.490	384	0.0	1.4	9.148	A
C-A	189	47			189				
A-B	42	11			42				
A-C	414	104			414				

17:00 - 17:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	142	36	542	0.262	142	0.3	0.4	9.066	A
B-A	18	4	300	0.060	18	0.0	0.1	13.782	B
C-AB	536	134	831	0.644	530	1.4	2.8	12.626	B
C-A	155	39			155				
A-B	50	13			50				
A-C	494	124			494				

17:15 - 17:30

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	174	43	509	0.342	173	0.4	0.5	10.815	B
B-A	22	6	228	0.097	22	0.1	0.1	18.883	C
C-AB	800	200	885	0.904	770	2.8	10.3	32.088	D
C-A	46	11			46				
A-B	62	15			62				
A-C	606	151			606				

17:30 - 17:45

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	174	43	508	0.342	174	0.5	0.5	10.875	B
B-A	22	6	221	0.100	22	0.1	0.1	19.580	C
C-AB	825	206	899	0.918	814	10.3	13.0	47.790	E
C-A	21	5			21				
A-B	62	15			62				
A-C	606	151			606				

17:45 - 18:00

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	142	36	542	0.262	143	0.5	0.4	9.124	A
B-A	18	4	289	0.062	18	0.1	0.1	14.360	B
C-AB	561	140	853	0.658	600	13.0	3.3	17.776	C
C-A	129	32			129				
A-B	50	13			50				
A-C	494	124			494				

18:00 - 18:15

Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	Unsignalised level of service
B-C	119	30	565	0.210	119	0.4	0.3	8.161	A
B-A	15	4	349	0.043	15	0.1	0.0	11.649	B
C-AB	395	99	800	0.494	402	3.3	1.6	9.790	A
C-A	183	46			183				
A-B	42	11			42				
A-C	414	104			414				

LinSig V1 style report

User and Project Details

Project:	
Title:	
Location:	Fosse Way_High Street, Syston
Additional detail:	
File name:	Fosse Way_High Street_RevB.lsg3x
Author:	
Company:	David Tucker Associates
Address:	

Phase Input Data

Phase Name	Phase Type	Assoc. Phase	Street Min	Cont Min
A	Traffic		7	7
B	Traffic		7	7
C	Ind. Arrow	B	4	4
D	Traffic		7	7

Phase Intergreens Matrix

Terminating Phase \ Starting Phase	A	B	C	D
A		-	5	5
B	-		-	7
C	5	-		7
D	7	7	5	

Phase Delays

Term. Stage	Start Stage	Phase	Type	Value	Cont value
There are no Phase Delays defined					

Prohibited Stage Change

From Stage \ To Stage	1	2	3
1		5	7
2	5		7
3	7	X	

Phases in Stage

Stage No.	Phases in Stage
1	A B
2	B C
3	D

Give-Way Lane Input Data

Junction: Unnamed Junction

Lane	Movement	Max Flow when Giving Way (PCU/Hr)	Min Flow when Giving Way (PCU/Hr)	Opposing Lane	Opp. Lane Coeff.	Opp. Mvmnts.	Right Turn Storage (PCU)	Non-Blocking Storage (PCU)	RTF	Right Turn Move up (s)	Max Turns in Intergreen (PCU)
1/1 (Fosse Way (south))	6/1 (Right)	1439	0	2/1	1.09	All	2.00	2.00	0.50	2	2.00

Lane Input Data

Junction: Unnamed Junction

Lane	Lane Type	Phases	Start Disp.	End Disp.	Physical Length (PCU)	Sat Flow Type	Def User Saturation Flow (PCU/Hr)	Lane Width (m)	Gradient	Nearside Lane	Turns	Turning Radius (m)
1/1 (Fosse Way (south))	O	B C	2	3	60.0	Geom	-	3.30	0.00	Y	Arm 5 Ahead	Inf
											Arm 6 Right	16.00
2/1 (Fosse Way (north))	U	A	2	3	60.0	Geom	-	3.70	0.00	Y	Arm 4 Ahead	Inf
											Arm 6 Left	17.00
3/1 (High Street)	U	D	2	3	60.0	Geom	-	3.20	0.00	Y	Arm 4 Left	15.00
											Arm 5 Right	21.00
4/1 (Fosse Way (south))	U		2	3	60.0	Inf	-	-	-	-	-	-
5/1 (Fosse Way (north))	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (High Street)	U		2	3	60.0	Inf	-	-	-	-	-	-

Lane Saturation Flows

Scenario 1: '2018 Base AM Peak' (FG1: '2018 Base AM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction

Lane	Lane Width (m)	Gradient	Nearside Lane	Allowed Turns	Turning Radius (m)	Turning Prop.	Sat Flow (PCU/Hr)	Flared Sat Flow (PCU/Hr)
1/1 (Fosse Way (south))	3.30	0.00	Y	Arm 5 Ahead	Inf	24.6 %	1817	1817
				Arm 6 Right	16.00	75.4 %		
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	54.1 %	1908	1908
				Arm 6 Left	17.00	45.9 %		
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	66.9 %	1774	1774
				Arm 5 Right	21.00	33.1 %		
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 2: '2018 Base PM Peak' (FG2: '2018 Base PM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Fosse Way (south))	3.30	0.00	Y	Arm 5 Ahead	Inf	33.5 %	1831	1831
				Arm 6 Right	16.00	66.5 %		
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	61.3 %	1919	1919
				Arm 6 Left	17.00	38.7 %		
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	66.4 %	1775	1775
				Arm 5 Right	21.00	33.6 %		
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 3: '2026 Base AM Peak' (FG3: '2026 Base AM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Fosse Way (south))	3.30	0.00	Y	Arm 5 Ahead	Inf	24.7 %	1817	1817
				Arm 6 Right	16.00	75.3 %		
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	54.2 %	1908	1908
				Arm 6 Left	17.00	45.8 %		
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	66.9 %	1774	1774
				Arm 5 Right	21.00	33.1 %		
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 4: '2026 Base PM Peak' (FG4: '2026 Base PM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Fosse Way (south))	3.30	0.00	Y	Arm 5 Ahead	Inf	33.5 %	1831	1831
				Arm 6 Right	16.00	66.5 %		
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	61.3 %	1920	1920
				Arm 6 Left	17.00	38.7 %		
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	66.3 %	1775	1775
				Arm 5 Right	21.00	33.7 %		
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 5: '2026 Base + Dev AM Peak' (FG5: '2026 Base + Dev AM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Fosse Way (south))	3.30	0.00	Y	Arm 5 Ahead	Inf	24.3 %	1816	1816
				Arm 6 Right	16.00	75.7 %		
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	54.1 %	1908	1908
				Arm 6 Left	17.00	45.9 %		
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	68.0 %	1774	1774
				Arm 5 Right	21.00	32.0 %		
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf

Scenario 6: '2026 Base + Dev PM Peak' (FG6: '2026 Base + Dev PM Peak', Plan 1: 'Network Control Plan 1')

Junction: Unnamed Junction								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (Fosse Way (south))	3.30	0.00	Y	Arm 5 Ahead	Inf	32.2 %	1829	1829
				Arm 6 Right	16.00	67.8 %		
2/1 (Fosse Way (north))	3.70	0.00	Y	Arm 4 Ahead	Inf	60.8 %	1919	1919
				Arm 6 Left	17.00	39.2 %		
3/1 (High Street)	3.20	0.00	Y	Arm 4 Left	15.00	67.0 %	1774	1774
				Arm 5 Right	21.00	33.0 %		
4/1 (Fosse Way (south) Lane 1)	Infinite Saturation Flow						Inf	Inf
5/1 (Fosse Way (north) Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (High Street Lane 1)	Infinite Saturation Flow						Inf	Inf

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2018 Base AM Peak'	08:00	09:00	01:00	
2: '2018 Base PM Peak'	17:00	18:00	01:00	
3: '2026 Base AM Peak'	08:00	09:00	01:00	
4: '2026 Base PM Peak'	17:00	18:00	01:00	
5: '2026 Base + Dev AM Peak'	08:00	09:00	01:00	
6: '2026 Base + Dev PM Peak'	17:00	18:00	01:00	

Traffic Flows, Desired

FG1: '2018 Base AM Peak'

Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	212	250	462
	B	142	0	287	429
	C	116	356	0	472
	Tot.	258	568	537	1363

FG2: '2018 Base PM Peak'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	117	185	302
	B	147	0	290	437
	C	161	319	0	480
	Tot.	308	436	475	1219

FG3: '2026 Base AM Peak'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	229	271	500
	B	154	0	311	465
	C	126	385	0	511
	Tot.	280	614	582	1476

FG4: '2026 Base PM Peak'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	126	200	326
	B	159	0	313	472
	C	174	345	0	519
	Tot.	333	471	513	1317

FG5: '2026 Base + Dev AM Peak'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	230	271	501
	B	156	0	331	487
	C	126	392	0	518
	Tot.	282	622	602	1506

FG6: '2026 Base + Dev PM Peak'
Desired Flow :

		Destination			
		A	B	C	Tot.
Origin	A	0	129	200	329
	B	160	0	325	485
	C	174	367	0	541
	Tot.	334	496	525	1355

Stage Timings

Scenario 1: '2018 Base AM Peak' (FG1: '2018 Base AM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	38	25	38
Change Point	0	45	75

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.5%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.5%**
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	68	25	472	1817	636	74.2%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	38	-	462	1908	620	74.5%
3/1	High Street Left Right	U	N/A	N/A	D		1	38	-	429	1774	577	74.4%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	537	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	258	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	568	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**101**	**249**	**6**	**12.8**	**4.3**	**0.6**	**17.6**	-	-	-	-
Unnamed Junction	-	-	**101**	**249**	**6**	**12.8**	**4.3**	**0.6**	**17.6**	-	-	-	-
1/1	472	472	101	249	6	3.8	1.4	0.6	5.8	44.5	13.8	1.4	15.2
2/1	462	462	-	-	-	4.6	1.4	-	6.1	47.3	13.6	1.4	15.0
3/1	429	429	-	-	-	4.3	1.4	-	5.7	48.0	12.6	1.4	14.1
4/1	537	537	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	258	258	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	568	568	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 20.8 Total Delay for Signalled Lanes (pcuHr): 17.63 Cycle Time (s): 120
PRC Over All Lanes (%): 20.8 Total Delay Over All Lanes(pcuHr): 17.63

Stage Timings

Scenario 2: '2018 Base PM Peak' (FG2: '2018 Base PM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	52	4	45
Change Point	0	59	68

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**64.2%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**64.2%**
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	61	4	480	1831	750	64.0%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	52	-	302	1919	848	35.6%
3/1	High Street Left Right	U	N/A	N/A	D		1	45	-	437	1775	680	64.2%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	475	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	308	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	436	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**295**	**19**	**5**	**8.8**	**2.1**	**0.4**	**11.3**	-	-	-	-
Unnamed Junction	-	-	**295**	**19**	**5**	**8.8**	**2.1**	**0.4**	**11.3**	-	-	-	-
1/1	480	480	295	19	5	3.3	0.9	0.4	4.6	34.3	12.4	0.9	13.3
2/1	302	302	-	-	-	1.9	0.3	-	2.1	25.5	6.6	0.3	6.9
3/1	437	437	-	-	-	3.7	0.9	-	4.6	37.6	11.9	0.9	12.8
4/1	475	475	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	308	308	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	436	436	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1

PRC for Signalled Lanes (%): 40.1
PRC Over All Lanes (%): 40.1

Total Delay for Signalled Lanes (pcuHr): 11.28
Total Delay Over All Lanes(pcuHr): 11.28

Cycle Time (s): 120

Stage Timings

Scenario 3: '2026 Base AM Peak' (FG3: '2026 Base AM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	54	11	36
Change Point	0	61	77

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**85.0%**
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	70	11	511	1817	605	84.5%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	54	-	500	1908	875	57.2%
3/1	High Street Left Right	U	N/A	N/A	D		1	36	-	465	1774	547	85.0%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	582	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	280	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	614	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**237**	**141**	**6**	**12.5**	**5.9**	**0.8**	**19.1**	-	-	-	-
Unnamed Junction	-	-	**237**	**141**	**6**	**12.5**	**5.9**	**0.8**	**19.1**	-	-	-	-
1/1	511	511	237	141	6	4.1	2.6	0.8	7.5	52.7	15.8	2.6	18.3
2/1	500	500	-	-	-	3.3	0.7	-	4.0	28.6	12.2	0.7	12.9
3/1	465	465	-	-	-	5.0	2.7	-	7.7	59.5	14.5	2.7	17.1
4/1	582	582	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	280	280	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	614	614	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 5.9 Total Delay for Signalled Lanes (pcuHr): 19.14 Cycle Time (s): 120
PRC Over All Lanes (%): 5.9 Total Delay Over All Lanes(pcuHr): 19.14

Stage Timings

Scenario 4: '2026 Base PM Peak' (FG4: '2026 Base PM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	53	4	44
Change Point	0	60	69

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.9%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**70.9%**
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	62	4	519	1831	737	70.4%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	53	-	326	1920	864	37.7%
3/1	High Street Left Right	U	N/A	N/A	D		1	44	-	472	1775	666	70.9%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	513	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	333	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	471	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**319**	**20**	**6**	**9.8**	**2.7**	**0.5**	**13.0**	-	-	-	-
Unnamed Junction	-	-	**319**	**20**	**6**	**9.8**	**2.7**	**0.5**	**13.0**	-	-	-	-
1/1	519	519	319	20	6	3.7	1.2	0.5	5.3	37.1	14.0	1.2	15.2
2/1	326	326	-	-	-	2.0	0.3	-	2.3	25.2	7.2	0.3	7.5
3/1	472	472	-	-	-	4.2	1.2	-	5.4	41.1	13.4	1.2	14.6
4/1	513	513	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	333	333	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	471	471	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 26.9 Total Delay for Signalled Lanes (pcuHr): 13.02 Cycle Time (s): 120
PRC Over All Lanes (%): 26.9 Total Delay Over All Lanes(pcuHr): 13.02

Stage Timings

Scenario 5: '2026 Base + Dev AM Peak' (FG5: '2026 Base + Dev AM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	60	5	36
Change Point	0	67	77

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**89.0%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**89.0%**
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	70	5	518	1816	592	87.6%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	60	-	501	1908	970	51.7%
3/1	High Street Left Right	U	N/A	N/A	D		1	36	-	487	1774	547	89.0%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	602	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	282	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	622	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**298**	**88**	**7**	**12.1**	**7.4**	**0.8**	**20.3**	-	-	-	-
Unnamed Junction	-	-	**298**	**88**	**7**	**12.1**	**7.4**	**0.8**	**20.3**	-	-	-	-
1/1	518	518	298	88	7	4.0	3.2	0.8	8.1	56.3	16.3	3.2	19.5
2/1	501	501	-	-	-	2.7	0.5	-	3.3	23.5	11.1	0.5	11.7
3/1	487	487	-	-	-	5.4	3.6	-	9.0	66.3	15.4	3.6	19.0
4/1	602	602	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	282	282	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	622	622	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 1.1 Total Delay for Signalled Lanes (pcuHr): 20.34 Cycle Time (s): 120
PRC Over All Lanes (%): 1.1 Total Delay Over All Lanes(pcuHr): 20.34

Stage Timings

Scenario 6: '2026 Base + Dev PM Peak' (FG6: '2026 Base + Dev PM Peak', Plan 1: 'Network Control Plan 1')

Stage	1	2	3
Duration	54	4	43
Change Point	0	61	70

Network Results

Item	Lane Description	Lane Type	Controller Stream	Position In Filtered Route	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)
Network	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.6%**
Unnamed Junction	-	-	**N/A**	-	-		-	-	-	-	-	-	**74.6%**
1/1	Fosse Way (south) Ahead Right	O	N/A	N/A	B	C	1	63	4	541	1829	738	73.3%
2/1	Fosse Way (north) Ahead Left	U	N/A	N/A	A		1	54	-	329	1919	880	37.4%
3/1	High Street Left Right	U	N/A	N/A	D		1	43	-	485	1774	650	74.6%
4/1	Fosse Way (south)	U	N/A	N/A	-		-	-	-	525	Inf	Inf	0.0%
5/1	Fosse Way (north)	U	N/A	N/A	-		-	-	-	334	Inf	Inf	0.0%
6/1	High Street	U	N/A	N/A	-		-	-	-	496	Inf	Inf	0.0%

Item	Arriving (pcu)	Leaving (pcu)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Uniform Delay (pcuHr)	Rand + Oversat Delay (pcuHr)	Storage Area Uniform Delay (pcuHr)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Max. Back of Uniform Queue (pcu)	Rand + Oversat Queue (pcu)	Mean Max Queue (pcu)
Network	-	-	**339**	**21**	**6**	**10.2**	**3.1**	**0.5**	**13.9**	-	-	-	-
Unnamed Junction	-	-	**339**	**21**	**6**	**10.2**	**3.1**	**0.5**	**13.9**	-	-	-	-
1/1	541	541	339	21	6	3.8	1.4	0.5	5.7	38.0	14.9	1.4	16.2
2/1	329	329	-	-	-	1.9	0.3	-	2.2	24.5	7.1	0.3	7.4
3/1	485	485	-	-	-	4.5	1.4	-	5.9	43.8	14.0	1.4	15.5
4/1	525	525	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
5/1	334	334	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	496	496	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0

C1 PRC for Signalled Lanes (%): 20.7 Total Delay for Signalled Lanes (pcuHr): 13.86 Cycle Time (s): 120
PRC Over All Lanes (%): 20.7 Total Delay Over All Lanes(pcuHr): 13.86