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Land West of Turners Hill Road, Crawley Down: WSCC Response Note

Ref: DS/LJ/ITB9155-077
Date: 14 April 2025

SECTION 1 Introduction

1.1.1 This note responds to further comments received by West Sussex County Council (WSCC) in respect of Wates Developments' outline planning applications for up to 350 homes and a 70-bed care home (use class C2) on land west of Turners Hill Road, Crawley Down. The site is being bought forward as two separate planning applications:

1. Land to the south of Huntsland for up to 200 dwellings (DM/25/0014 & DM/25/0015); and
2. Land to the north of Huntsland for up to 150 dwellings, a care home (Use Class C2) up to 70 beds, and community facility (DM/25/0016 & NH/25/0017).

1.1.2 WSCC provided initial comments in a consultation response dated 13 February 2025, and i-Transport responded to these in a Transport Assessment Addendum (ref: ITB9155-072 & ITB9155-073), dated 26 March 2025.

1.1.3 A further response was provided by WSCC dated 8 April 2025 – the response identifies that comment from its own internal consultees (e.g. traffic signals) is awaited but sets out a number of matters where further information and / or modification is sought. The outstanding comments are summarised in **Table 1.1**.

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Table 1.1: Summary of WSCC Comments

WSCC Comment	i-Transport Response
Provide Previous scoping note – Wychwood Place	Attached at Appendix A
Widening of Wychwood Place carriageway	Response in Paragraph 2.1.2
Provide location of Speed Surveys	Presented at Section 2.2.1
Provide extension of shared use path on Turners Hill Road	Extension of footway on Turners Hill Road presented in Drawing ITB9155-GA-101
Remove emergency access link between parcels	Link will not be provided for emergency access.
Split off-site improvement drawing	Split into three drawings to set out northern and southern development parcel works. Drawing ITB9155-GA-101 and 102 relate to the works associated with the southern parcel of development while ITB9155-GA-103 relates to the works associated with the northern parcel.
Refine S106 Contribution	Updated to account for surfacing improvements and car club obligation
Concern on underfunded improvement works if one site does not come forward	Contribution will be allocated entirely to southern development parcel only.
Update Framework Travel Plan to include formal monitoring and remedial measures	Attached separately. Monitoring and measures have been updated

1.1.4 Further commentary is provided on each of the points in Section 2. For ease, these have been retained in the order of which they are presented in the WSCC response, with the exception of Travel Plan comments which have been included for both sites.

SECTION 2 Response to Comments

2.1 Northern Application Site

Scoping Note

2.1.1 WSCC request that the previous scoping note, used as a basis of discussions for supporting the intention to use Wychwood Place as the sole vehicular access point, is provided. This document is ITB9155-044A and is included within the pre-application pack submitted to WSCC on 14 March 2025. For convenience, it has been attached at **Appendix A** of this note.

Widening of Bend

2.1.2 WSCC has stated that ideally it would request widening of the bend at Wychwood Place. It is not within the gift of Wates Developments to provide widening at the bend; to do so would require the use of the third-party land outside of the control of the Applicant.

2.1.3 In respect of design matters, the relevant transport test in national guidance, set out in Paragraph 115 of the NPPF, is that "the design of streets, parking areas and other transport elements reflects current national guidance". As acknowledged in the WSCC response, the bend represents the minimum design standards set out in Manual for Streets and, as such, the bend satisfies this policy requirement.

2.1.4 Paragraph 115 of the NPPF does not require that the design exceed the relevant standards. Therefore, the inclusion of a planning condition or obligation to require widening of the bend would not be appropriate. Such an inclusion would be contrary to paragraph 57, in that it would not be 'necessary' nor 'reasonable', neither would it satisfy NPPF paragraph 58 and CIL Reg 122 in that it is not necessary to make the development acceptable in planning terms.

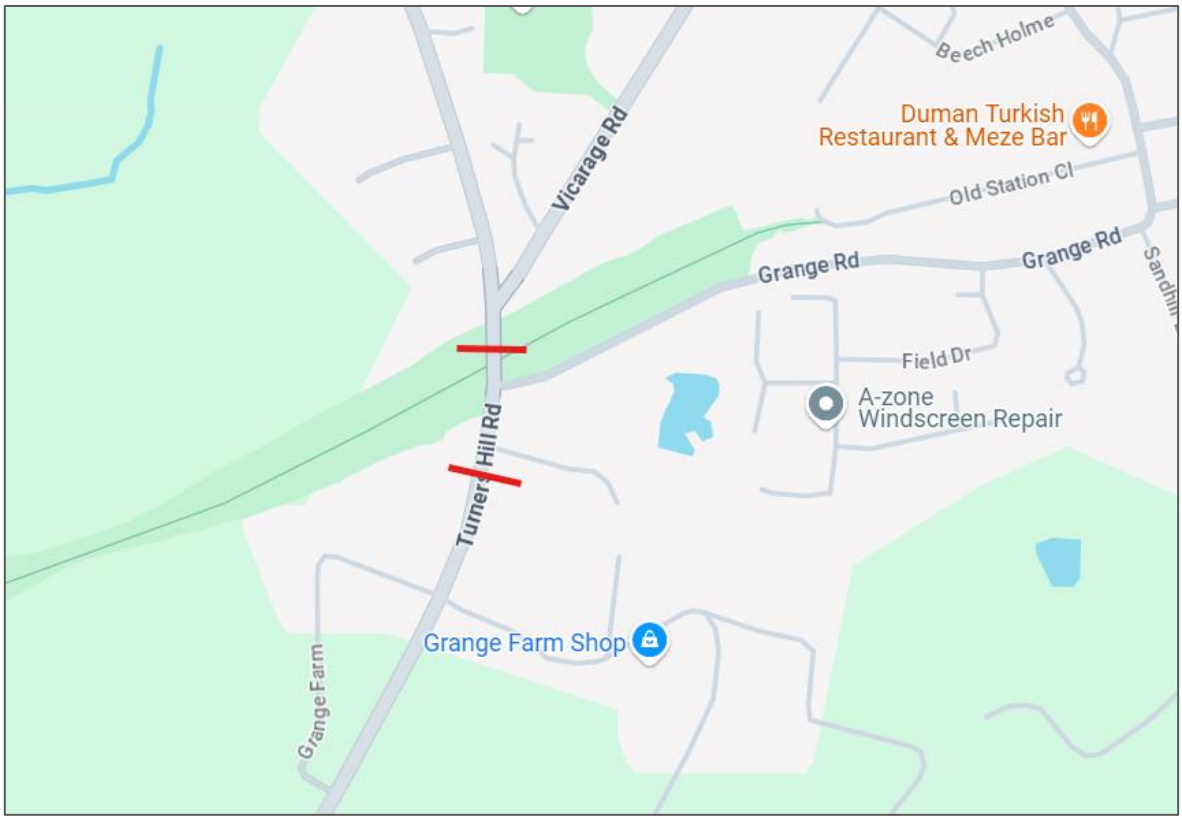
2.1.5 Therefore, no widening of the bend at Wychwood Place is proposed and the carriageway will be retained in its current form.

2.2 Southern Application Site

Location of ATC

2.2.1 The location of the speed surveys are presented in **Image 2.1**. The northbound speeds are taken from the southern ATC and southbound speeds from the northern ATC.

Image 2.1: Speed Survey Location



Off-Site Improvements

2.2.2 WSCC has indicated a preference for the shared-use pedestrian / cycle route on the eastern side of the carriageway, which is shown to extend a short distance to the south of the converted Huntsland Toucan crossing, be extended to Sunny Avenue. At a minimum, it seeks that the route is widened to a minimum 1.8m footway that extends to Sunny Avenue only.

2.2.3 In order to accommodate a full width 3m extension of the route between Huntsland Toucan and Sunny Avenue, the carriageway of Turners Hill Road would need to be narrowed to c. 5.7. The route is used by larger vehicles, and such a reduction in carriageway width would be out of keeping with the remainder of the route.

2.2.4 A full-width cycle/footway will be provided within the site as an alternative means of accommodating pedestrian / cyclists journeys than use of the Turners Hill Road – WSCC has sought a condition / obligation to this effect. However, widening of the route between Huntsland and Sunny Avenue has been identified, and is shown in ITB9155-GA-101. The width would be predominately 2.5m, with some localised narrowings. Such a route would enable the continuation of cycle journeys off-carriageway to Sunny Avenue. However, if preferred by WSCC, the route can be provided for pedestrian use only and the identified widening satisfies the minimum 1.8m sought by the WSCC.

Emergency Link

2.2.5 The need for an emergency link between parcels 5 and 6 has been questioned, and potential difficulties in deliverability identified.

2.2.6 In the interests of protecting trees and landscape, the emergency link will not be provided, and it shall be retained as a pedestrian and cyclist route only.

2.3 Both Sites

Framework Travel Plan

2.3.1 The accompanying Framework Travel Plans for each application site have been updated to respond to the monitoring and additional measures set out by WSCC. In summary:

- Removal of questionnaire surveys and SAM Surveys undertaken in Years 1, 3 and 5.
- Commitment to additional measures to being implemented if targets are not met, and the identification of some potential measures. An exact schedule will be defined as part of the approval process associated with the full Travel Plan.

Split of Works

2.3.2 WSCC has requested that the off-site improvement drawing is split to only show the works relevant to each application. These have been split into three separate drawings which identify the three works schemes. The schemes are presented on Drawings **ITB9155-GA-101, 102** and **103.**

S106

2.3.3 The Turners Hill Road surfacing has been removed from the scheme and replaced by the widening of the footway and / or provision of shared use, as shown in Drawing **ITB19155-GA-102**. This has been allocated to the southern site.

2.3.4 The Applicant is willing to accept an obligation that requires it to arrange and fund the Car Club directly.

2.3.5 The entirety of the Worth Way contribution has been allocated to the southern parcel so that it can be funded solely from one development.

2.3.6 The updated schedule is attached at **Appendix B**.

SECTION 3 Summary

3.1.1 This note responds to WSCC's Planning Responses in relation to the proposed development of 350 homes and 70-bed care home (use class c2) on land west of Turners Hill Road, Crawley Down, which seeks further information to address the remaining highway concerns. The issues identified by WSCC have been addressed within this note.

3.1.2 The note demonstrates that:

1 A number of matters previously raised by WSCC have been addressed and agreed.

2 Widening of the carriageway at the bend on Wychwood Place is not possible and not required in planning terms to make the development acceptable.

3 An extension of the shared footway has been proposed on Turners Hill Road from between the toucan crossing upgrade and Sunny Avenue.

4 The emergency link between parcels 5 and 6 has been downgraded to a pedestrian / cycle link only.

5 The Framework Travel Plans have been updated to account for formal monitoring and remedial measures.

6 Clarity has been provided on the S106 Contribution split.

3.1.3 The note therefore fully responds to all comments raised by WSCC and demonstrates that the proposal is acceptable in highways and transport terms, in accordance with paragraphs 115 and 116 of the NPPF.

3.1.4 For clarity, the table below sets out the highway plans that are now subject of the application, and those that have been superseded.

Table 3.1: Highway Drawings

Original Plan	Revised Plan
ITB9155-GA-056C Off-site Improvements	ITB9155-GA-101 Off-site Pedestrian / Cycle Improvement – Southern Application Site
	ITB9155-GA-102 Off-site Pedestrian / Cycle Improvement – Southern Application Site
	ITB9155-GA-103 Off-site Pedestrian / Cycle Improvement – Northern Application Site
ITB9155-GA-038I Proposed Central Site Access Priority Junction Southern Application Site	Unchanged

Original Plan	Revised Plan
ITB9155-GA-69A Proposed Southern Site Access Priority Junction Southern Application Site	Unchanged
ITB9155-GA-048C Proposed Access Road Extension – Wychwood Place Northern Application Site	Unchanged
ITB9155-GA-064 Proposed Amendments to Wychwood Place Northern Application Site	Unchanged

DRAWINGS

TOUCAN CROSSING -
SEE DRAWING ITB9155-GA-038I

3.0m SHARED SURFACE CONTINUATION

DROPPED KERB
PROVISION REQUIRED

SHARED FOOTWAY 2.5m
WITH LOCALISED NARROWING

POTENTIAL LOCATION OF CORDUROY
SHOULD ROUTE PROVIDE A SHARED USE

CYCLIST TO JOIN CARRIAGEWAY

PROVISION OF DROPPED KERB
CROSSING AND TACTILE PAVING

SCALE BAR @ 1:500
0 5 10 25 50

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REV	DATE	BY	DESCRIPTION	CHK	APD

STATUS: FOR INFORMATION

TITLE: OFF SITE PEDESTRIAN / CYCLIST IMPROVEMENTS

PROJECT: WYCHWOOD, TURNERS HILL ROAD, CRAWLEY DOWN

CLIENT: WATES DEVELOPMENTS

DRAWN:	CHECKED:	APPROVED:
TA	LJ	MS
PROJECT No:	SCALE @ A1:	DATE:
ITB9155	1:500	10.04.25
DRAWING No:		REV:
ITB9155-GA-101		-

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INSET 6 - PEDESTRIAN IMPROVEMENTS -
SITE ACCESS / VICARAGE ROAD -
TURNERS HILL ROAD (SOUTH)
SCALE 1:500

PEDESTRIAN CROSSING WITH DROPPED KERBS AND TACTILE PAVING

TOUCAN CROSSING - SEE DRAWING ITB9155-GA-069A

FOR WORTH WAY IMPROVEMENTS - SEE DRAWING ITB9155-GA-059

PROVISION OF DROPPED KERB CROSSING AND TACTILE PAVING

PEDESTRIAN CROSSING WITH DROPPED KERBS AND TACTILE PAVING

BUS STOP SHELTER

PROVISION OF RTPI INFORMATION - EXACT LOCATION TO BE AGREED AT DETAILED DESIGN STAGE

PROVISION OF TRIEF KERBS ALONG BOARDING AREA

2.0m WIDE FOOTWAY

1.5m WIDE FOOTWAY

PROVISION OF TRIEF KERBS ALONG BOARDING AREA

PROVISION OF RTPI INFORMATION - EXACT LOCATION TO BE AGREED AT DETAILED DESIGN STAGE

BUS STOP SHELTER (CANTILEVER STYLE)

SCALE BAR @ 1:500
0 5 10 25 50

SEE INSET 1

SEE INSET 2

SEE INSET 3

SEE INSET 4

SEE INSET 5

SEE INSET 6

2.0m-3.0m WIDE SECTION OF FOOTWAY / CYCLEWAY

3.0m WIDE SECTION OF FOOTWAY / CYCLEWAY

3.0m WIDE SECTION OF FOOTWAY / CYCLEWAY

SCALE BAR @ 1:1250
0 10 25 50 100 125

INSET 1 - PEDESTRIAN IMPROVEMENTS -
SUNNYHILL CLOSE
SCALE 1:500

PROVISION OF DROPPED KERB CROSSING AND TACTILE PAVING

INSET 2 - PEDESTRIAN IMPROVEMENTS -
BUCKLEY PLACE
SCALE 1:500

PROVISION OF DROPPED KERB CROSSING AND TACTILE PAVING

INSET 3 - PEDESTRIAN IMPROVEMENTS -
SQUIRES CLOSE
SCALE 1:500

PROVISION OF DROPPED KERB CROSSING AND TACTILE PAVING

INSET 4 - PEDESTRIAN IMPROVEMENTS -
SUNNY AVENUE (EAST)
SCALE 1:500

PROVISION OF DROPPED KERB CROSSING AND TACTILE PAVING

INSET 5 - PEDESTRIAN IMPROVEMENTS -
GLEBELANDS
SCALE 1:500

PROVISION OF DROPPED KERB CROSSING AND TACTILE PAVING

SCALE BAR @ 1:500
0 5 10 25 50

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REV	DATE	BY	DESCRIPTION	CHK	APD

STATUS: FOR INFORMATION

TITLE: OFF SITE PEDESTRIAN / CYCLIST IMPROVEMENTS
SOUTHERN APPLICATION SITE

PROJECT: WYCHWOOD, TURNERS HILL ROAD, CRAWLEY DOWN

CLIENT: WATES DEVELOPMENTS

DRAWN:	CHECKED:	APPROVED:
TA	LJ	MS
PROJECT No:	SCALE @ A1:	DATE:
ITB9155	AS SHOWN	10.04.25
DRAWING No:		REV:
ITB9155-GA-102		-

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SEE INSET 1

SEE INSET 2

WYCHWOOD PLACE

SANDY LANE

WYCHWOOD PLACE

SCALE BAR @ 1:500
0 5 10 25 50

INSET 1 - PEDESTRIAN IMPROVEMENTS - TURNERS HILL ROAD (NORTH)
SCALE 1:500

PROVISION OF TRIEF KERBS ALONG BOARDING AREA

PROVISION OF RTPI INFORMATION - EXACT LOCATION TO BE AGREED AT DETAILED DESIGN STAGE

PROVISION OF RTPI INFORMATION - EXACT LOCATION TO BE AGREED AT DETAILED DESIGN STAGE

PROVISION OF TRIEF KERBS ALONG BOARDING AREA

BUS STOP SHELTER

BUS STOP SHELTER (CANTILEVER STYLE)

SCALE BAR @ 1:250
0 1 2 5 10 25

INSET 2 - PEDESTRIAN IMPROVEMENTS - WYCHWOOD PLACE
SCALE 1:500

CUT BACK AND MAINTAIN VEGETATION TO USE FULL WIDTH OF FOOTWAY

PROVISION OF DROPPED KERB

2.0m WIDE FOOTWAY

EXISTING SHARED SURFACE

WYCHWOOD PLACE

SANDY LANE

SCALE BAR @ 1:250
0 1 2 5 10 25

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REV	DATE	BY	DESCRIPTION	CHK	APD

STATUS: FOR INFORMATION

TITLE: OFF SITE IMPROVEMENTS NORTHERN APPLICATION SITE

PROJECT: WYCHWOOD, TURNERS HILL ROAD, CRAWLEY DOWN

CLIENT: WATES DEVELOPMENTS

DRAWN:	CHECKED:	APPROVED:
SH	LJ	MS
PROJECT No:	SCALE @ A1:	DATE:
ITB9155	AS SHOWN	10.04.25
DRAWING No:		REV:
ITB9155-GA-103		-

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APPENDIX A. SCOPING NOTE 044

Land West of Turners Hill Road, Crawley Down

Scoping Note – Traffic Modelling

Client: Wates Developments

i-Transport Ref: MS/SG/ITB9155-044

Date: 17 April 2024

Land West of Turners Hill Road, Crawley Down

Scoping Note – Traffic Modelling

Client: Wates Developments

i-Transport Ref: MS/SG/ITB9155-044

Date: 17 April 2024

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Quality Management

Report No.	Comments	Date	Author	Authorised
ITB9155-045	Final Draft	17/04/24	SG/MS	MS

File Ref: T:\Projects\9000 Series Project Numbers\9155ITB Wychwood, Turners Hill Rd, Crawley Down\Admin\Report & TN\044 450 Homes Scoping Note\ITB9155-044 TN Scoping Note 450 Homes - Traffic Analysis.docx

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Appendices

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SECTION 1 Introduction

1.1 The purpose of the note is to agree the traffic impact of development of up to 450 homes at the emerging District Plan allocation at Land West of Turners Hill Road, Crawley. The site is allocated for 350 homes and non-residential development in the emerging Regulation 19 Mid Sussex Submission District Plan (Regulation 19) (*ref: Policy DPA 9*). However, Wates are considering a planning application for up to 450 homes.

1.2 A previous scoping note related to the submission of an enlarged proposal for up to 450 homes was submitted on 23 December 2022. WSCC's consultation response of 12 January 2023 is provided at **Appendix A**. Broad agreement is reached that:

1 Safe and suitable access can be achieved in accordance with the NPPF and emerging District Plan policy (*ref: criterion 9 of Policy DPA9's pro-forma*). However, further consideration is given herein to the implications of intensifying Wychwood Place, in line with WSCC's feedback.

2 The site is in a sustainable location for transport, and this is confirmed by its emerging allocation in the District Plan and several local planning decisions. A detailed and robust sustainable transport strategy is being developed to ensure 'take up' of sustainable modes and will be the subject of a separate note.

3 The traffic impact of an additional 100 homes is unlikely to result in a material change in local network impacts compared with 350 homes – albeit this will need to be fully assessed. However, the broad parameters of the traffic assessment are agreed, i.e.:

- Trip Rates.
- Trip distribution / assignment.

1.3 This note focusses on point 3 above and provides a traffic study including junction capacity assessment, based on the agreed parameters.

1.4 The note also considers the suitability of Wychwood Place to serve additional homes.

1.5 Paragraph 114 to 115 of the NPPF set a very high bar for preventing development from coming forward for transport reasons – it is only when very significant (or 'severe) traffic impacts or unacceptable safety impacts occur that development should be prevented from coming forward on transport grounds. In this case, the impact of the appeal scheme will fall well below this level. This is a well-established test, and the 'high bar' has been recognised in numerous appeal decisions[1].

1.6 MSDC has commissioned their own study of the traffic impacts of the emerging District Plan as part of the District Plan evidence base. This is found in the Mid Sussex Transport Study (MSTS). This considers the performance of the network in 2039 with and without all District Plan development, including 350 homes at Turners Hill Road, Crawley Down. The study includes scenarios with vision-led trip rates that allow for internalisation and the emerging sustainable transport strategies of strategic sites.

1.7 The latest version of the study, stage 5, confirms the local highway network is capable of accommodating development at Turners Hill Road. Only one 'severe' impact (based on definitions set out in the MSTS) was identified locally - at the B2028 / B2110 crossroad in Turners Hill. The MSTS does not propose mitigation there at this time, although further exploration of the traffic impact and mitigation of planned growth is ongoing as part of the traffic study. However, the impact of the proposed development at this junction is considered within this Scoping Note.

1.8 Whilst MSDC have commissioned their own modelling, the work presented in this report remains important in the absence of a study of the impact of more than 350 homes

1.9 The remainder of this note is divided into 4 sections:

- Section 2 provides an overview of the traffic analysis parameters.
- Section 3 provides junction capacity assessment results.
- Section 4 outlines the implications for the intensification of the northern access.
- Section 5 provides a summary and conclusion.

[1] E.g.: Land at Blackfield Farm Church Road, Warton (appeal *ref: APP/M2325/A/14/2217060)*. Both the Inspector and Secretary of State (SoS) concluded that 360 homes would have a significant adverse effect on the local highway network (*ref: paragraph 125 of appeal decision / paragraph 10 of SoS letter)*. However, both agreed that the residual cumulative impact would not be 'severe'.

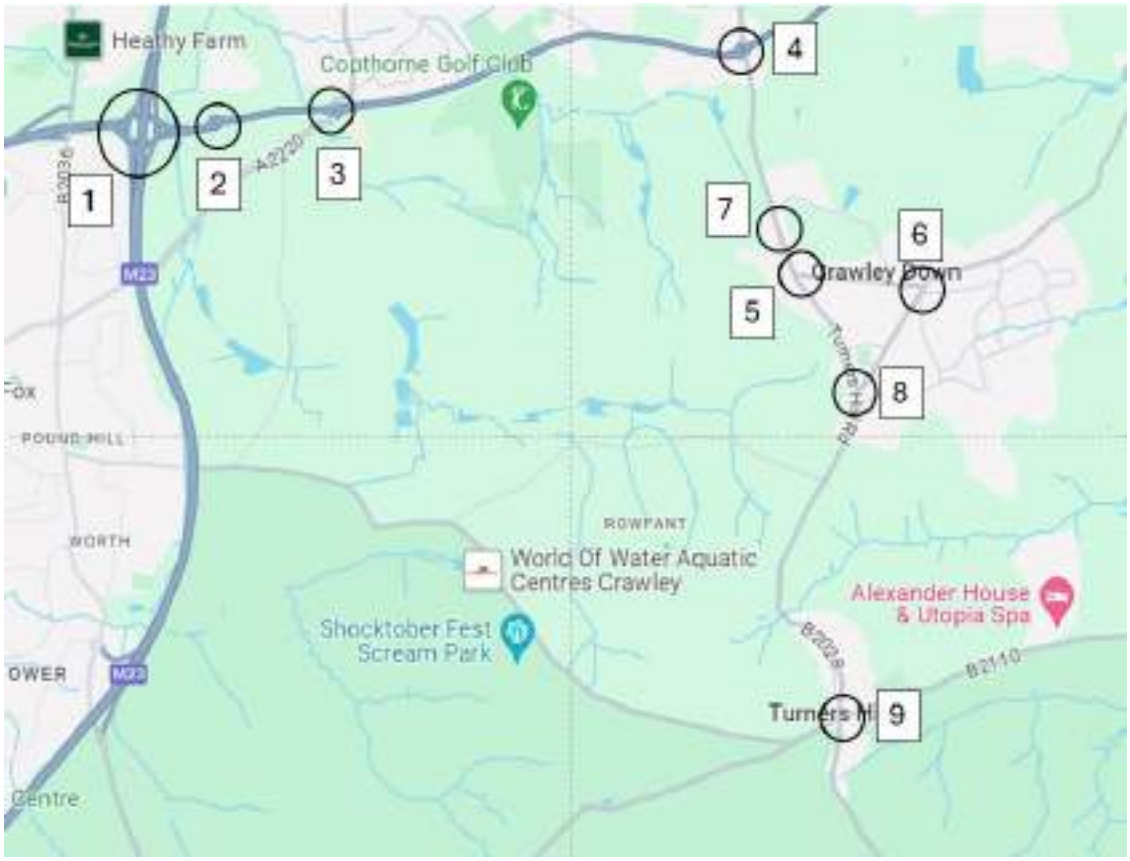
SECTION 2 Traffic Analysis Parameters

2.1 Study Area and Existing Traffic Flows

2.2 The junctions considered in this assessment are as follows:

1. M23 Junction 10 Interchange.
2. Copthorne Way Roundabout.
3. Brookhill Road / Copthorne Way / Copthorne Common Road Roundabout.
4. Dukes Head Roundabout.
5. Turners Hill Road / Sandy Lane Junction.
6. Hophurst Lane / Sandy Lane / Vicarage Road Junction.
7. Wychwood Place / Northern Site Access Junction.
8. Southern Site Access / Turners Hill Road / Vicarage Road Junction.
9. B2018 / B2110 North Street / East Street / Selsfield Road / Church Road Crossroads.

Image 2.1: Study Area



2.3 Turning counts and queue length surveys were undertaken at the junctions on Tuesday 14th November 2023, between 07:00 and 10:00 hours and 16:00 and 19:00 hours. The identified peak hours are at:

- 07:15 – 08:15.
- 16:45 – 17:45.

2.4 2023 traffic flows are presented in Figures TF1 (morning peak) and TF2 (evening peak).

2.5 Traffic Growth

2.5.1 A planning application is expected later in 2024. The traffic analysis is based on application year plus five years i.e. 2029. Unadjusted growth factors have been obtained from TEMPRO (based on 'high' traffic growth in line with strategic modelling in the Mid Sussex Transport Study)[2]. The growth factors inherently include the background traffic of increased housing and employment resulting from district or local plans. The growth factors are as follows:

- AM Peak: 1.0644
- PM Peak: 1.0794

2.5.2 2029 traffic flows are presented at Figures TF3 (morning peak) and TF4 (evening peak).

2.6 Committed Development

2.6.1 The study allows for traffic flows related to the proposed 'St Modwens' proposal for up to 500 new homes at land to the west of Copthorne. The proposal is directly bordered by the M23 to the west with Junction 10 to the southwest and the A264 to the south. Traffic flows have been obtained from the TA and added to the 2029 models.

2.6.2 WSCC are requested to advise of any further material committed developments for inclusion in the model.

2.7 2029 With Committed Development

2.7.1 Traffic diagrams showing traffic in 2029 with committed development are provided at Figures TF5 (morning peak) and TF6 (evening peak).

[2] Middle Layer Super Output Area Mid Sussex 005

2.8 Trip Rates

2.8.1 The following trip rates were previously agreed with WSCC. The trip rates were obtained from TRICS based on private dwellings and are set out below, together with the traffic generation of 450 homes, in **Table 2.1**.

Table 2.1: Trip Rates and Trip Generation (450 homes)

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	In	Out	2-way	In	Out	2-way
Trip Rate (per dwelling)	0.133	0.390	0.523	0.356	0.161	0.517
Trip Generation (450 homes)	60	176	235	160	72	233

Source: TRICS

2.8.2 It is proposed that the TA will also include an assessment based around 'Decide and Provide' principles, which will be based on a 10% reduction on the agreed trip rates. This is consistent with the approach taken to in the Mid Sussex Transport Study (MSTS).

2.8.3 The proposed development will incorporate a range of measures to encourage the uptake of active travel and public transport, working to reduce dependency on private car trips at the site, as well as reducing the need to travel off-site. These measures will be set out in the Sustainability Strategy and TA and discussed in a separate Scoping Note.

2.8.4 On this basis, 'Decide and Provide' trip rates are presented below.

Table 2.2: 'Decide and Provide' Trip Rates and Trip Generation (450 homes)

	AM Peak (08:00-09:00)			PM Peak (17:00-18:00)		
	In	Out	2-way	In	Out	2-way
Trip Generation (450 homes)	60	176	235	160	72	233
Decide and Provide (10% reduction)	54	158	212	144	65	209

Source: Consultant

2.8.5 For the purposes of this note, the remaining modelling is based on the trip rates outlined in Table 2.1, i.e. they follow a 'traditional' approach.

2.8.6 The emerging masterplan is expected to allow for up to 150 homes accessed through the northern access, 250 homes through the southern access and 50 homes through the central access. Development traffic is assigned to the network accordingly.

2.9 Traffic Distribution.

2.10 The traffic distribution of the site has been identified using 2011[3] census journey to work data for the Mid Sussex 005 mid-level output area. This approach is consistent with the approach agreed with WSCC for the 45 home planning application immediately east of the site, submitted in 2015 (*ref: ITB9155-001 R / planning application ref: DM/15/3614)* although that study used 2011 census data. The study has therefore been updated. The key destinations (by car) are identified below.

[3] Datasets from the 2021 census are still emerging although they are not expected to provide meaningful journey to work data because the census was undertaken during the 2021 COVID-19 lockdown and relates to journey habits from that time. A significantly higher-than-normal proportion of respondents would not have been making journeys. The 2011 census data therefore continues to be used for the purpose of trip distribution.

Table 2.3: Updated Traffic Distribution based on 2011 Census

Destination	Proportion by Car
Crawley	31%
East Grinstead	12%
Reigate and Banstead	9%
Tandridge	9%
Crawley Down	7%
South London	5%
Haywards Heath	4%
Central London	3%
Dorking	3%
Horsham	3%
Wealden	3%
Other	11%
Total	100%

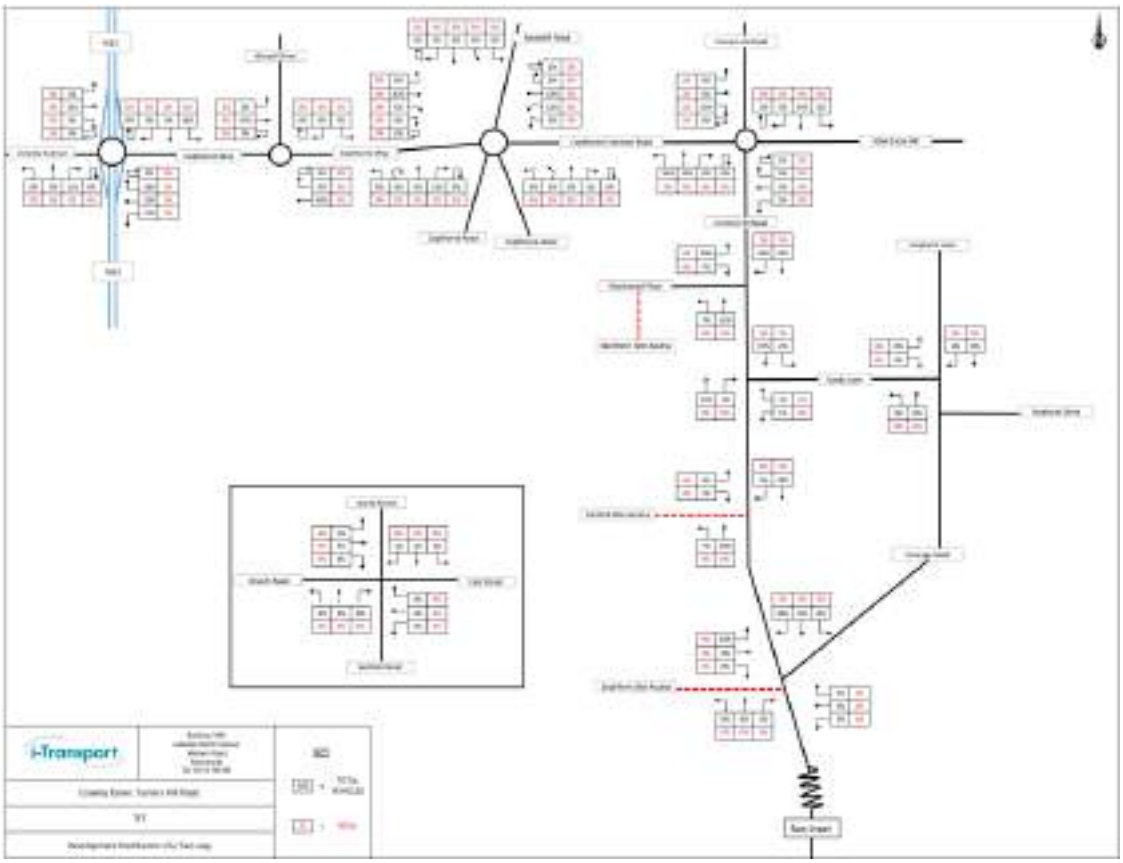
Source: 2011 Census Data

2.11 Traffic Assignment

2.11.1 Google Maps has been used to identify the most likely routes to the destination during the morning peak period.

2.12 The resulting traffic assignment is outlined in **Image 2.4** below.

Image 2.4: Traffic Assignment (Percentage)



2.13 Development traffic distribution through the network (expressed as a percentage) is shown in figure TF7 while development traffic assignment is shown in Figure TF8 (morning peak) and TF9 (evening peak)

2.14 2029 With Committed Development and Development Traffic

2.14.1 Traffic diagrams showing traffic in 2029 with committed development and development traffic are provided at Figures TF10 (morning peak) and TF11 (evening peak).

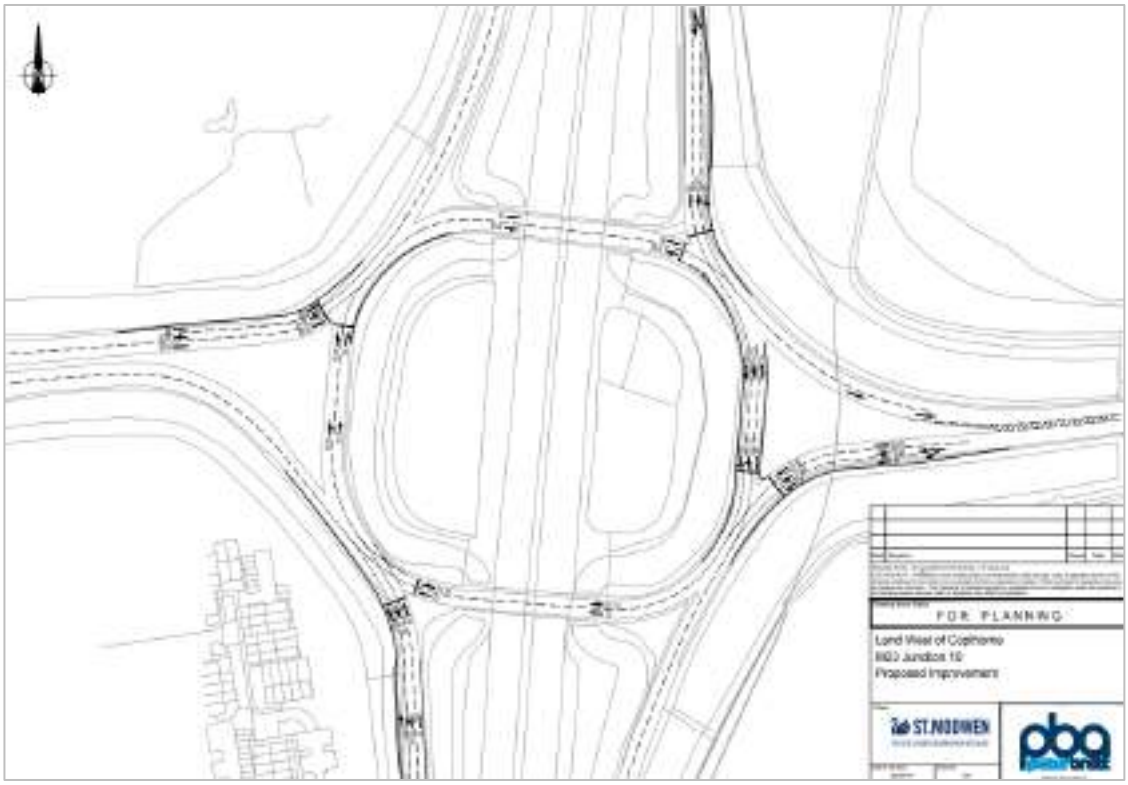
SECTION 3 Junction Capacity Assessment

3.1 Introduction

3.1.1 Junction capacity testing has been undertaken at the proposed northern and southern site access junctions (the two which will serve the largest numbers of homes) and the surveyed off-site junctions. The modelling has been undertaken using Junctions 10 (for priority junctions / roundabouts) and Linsig 3 (for signals).

3.1.2 The junctions have been assessed based on their existing configurations, with the exception of the M23 Junction 10, which will be subject to the below improvements[4], in association with the permission for the St Modwen scheme (also provided at **Appendix B**).

Image 3.1: M23 Junction 10 Improvement



3.1.3 The northern access has been modelled with an additional 150 homes while the southern access has been modelled with 250 homes. The central access will accommodate around 50 homes. This has not been modelled – if the northern and southern access operate acceptably, there is no reason why the central access would not also do so.

[4] Essentially, an additional lane is being added to most approaches and circulatory lanes of this already-signalised junction.

3.1.4 The junction capacity assessment outputs are provided at **Appendix C** while the summary results are provided below.

3.2 M23 Junction 10

Table 3.1: M23 Junction 10

	Morning Peak Hour			Evening Peak hour		
	Deg Sat %	Queue	Delay	Deg Sat %	Queue	Delay
2023 Observed (existing)						
A264 Copthorne Way Left	65.1%	7.9	19.6	91.4%	14.2	45.8
A264 Copthorne Way Ahead	74.5%	10.0	22.7	84.8%	11.3	35.0
M23 NB Off-Slip Left Ahead	84.1%	8.1	37.6	34.4%	1.9	17.1
M23 NB Off-Slip Ahead	96.8%	15.1	81.8	73.7%	8.5	27.2
A2011 Crawley Avenue Left	74.4%	10.5	20.1	75.8%	11.3	19.0
A2011 Crawley Avenue Ahead	60.8%	7.4	16.3	79.9%	12.6	20.9
M23 SB Off-Slip Left Ahead	96.6%	21.0	58.0	81.3%	11.4	27.3
M23 SB Off-Slip Ahead	78.4%	10.6	25.5	61.8%	7.2	19.7
2029 with Committed Development (improved)						
A264 Copthorne Way Left	63.2%	6.3	15.3	71.1%	7.7	16.7
A264 Copthorne Way Ahead	51.9%	5.8	16.2	44.3%	4.7	15.1
M23 NB Off-Slip Left Ahead	85.7%	8.9	35.6	41.7 %	3.8	17.1
M23 NB Off-Slip Ahead	67.9%	5.6	33.4	45.1%	4.2	20.0
A2011 Crawley Avenue Left	69.8%	7.3	18.8	71.9%	7.8	16.2
A2011 Crawley Avenue Ahead	53.3%	5.6	18.8	77.6%	11.3	22.3
M23 SB Off-Slip Left Ahead	83.7%	10.5	26.3	94.1%	13.6	47.9
M23 SB Off-Slip Ahead	77.1%	9.2	29.0	80.4%	7.9	39.7
2029 with Committed Development and Development (improved)						
A264 Copthorne Way Left	70.8%	7.6	19.0	73.5%	8.0	6.7
A264 Copthorne Way Ahead	62.5%	7.0	20.7	39.9%	4.2	3.8
M23 NB Off-Slip Left Ahead	87.2 : 87.4%	8.9	38.9	40.0%	3.8	3.5
M23 NB Off-Slip Ahead	84.8%	8.1	49.1	41.2%	3.9	3.6
A2011 Crawley Avenue Left	72.5%	7.9	18.6	73.3%	8.0	6.6
A2011 Crawley Avenue Ahead	44.3%	4.5	16.6	77.6%	11.3	9.6
M23 SB Off-Slip Left Ahead	82.3%	10.2	23.7	91.6%	12.3	7.5
M23 SB Off-Slip Ahead	70.3%	8.3	23.9	74.8%	7.1	5.7

Source: Linsig 3

3.3 Copthorne Way Roundabout

Table 3.2 Copthorne Way Roundabout

	Morning Peak Hour			Evening Peak hour		
	RFC	Queue	Delay	RFC	Queue	Delay
2023 Observed						
Worsell Drive	0.21	0.3	4.72	0.19	0.2	4.67
Copthorne Way (East)	0.62	1.6	5.33	0.67	2.1	5.88
Copthorne Way (West)	0.57	1.3	4.11	0.60	1.5	4.26
2029 with Committed Development						
Worsell Drive	0.51	1.0	7.97	0.46	0.8	7.41
Copthorne Way (East)	0.73	2.7	8.05	0.82	4.4	11.32
Copthorne Way (West)	0.66	2.0	5.30	0.76	3.2	7.49
2029 with Committed Development and Development						
Worsell Drive	0.52	1.1	8.27	0.48	0.9	8.14
Copthorne Way (East)	0.78	3.5	9.82	0.84	5.0	12.60
Copthorne Way (West)	0.68	2.1	5.53	0.80	3.9	8.83

Source: Junctions 10

3.4 Brookhill Road / Copthorne Way / Copthorne Common Road Roundabout

Table 3.3: Brookhill Road / Copthorne Roundabout

	Morning Peak Hour			Evening Peak hour		
	RFC	Queue	Delay	RFC	Queue	Delay
2023 Observed						
Brookhill Road	0.43	0.8	5.09	0.36	0.6	4.44
Copthorne Common Road	0.66	1.9	7.57	0.73	2.7	8.88
Copthorne Hotel	0.01	0.0	5.15	0.01	0.0	4.77
Copthorne Road	0.51	1.0	5.52	0.58	1.4	6.42
Copthorne Way	0.64	1.8	5.73	0.66	1.9	5.98
2029 with Committed Development						
Brookhill Road	0.46	0.9	5.59	0.46	0.8	5.55
Copthorne Common Road	0.69	2.1	8.20	0.84	5.0	15.28
Copthorne Hotel	0.01	0.0	5.33	0.01	0.0	5.58
Copthorne Road	0.52	1.1	5.76	0.68	2.1	8.95
Copthorne Way	0.70	2.3	6.91	0.76	3.1	8.49
2029 with Committed Development and Development						
Brookhill Road	0.47	0.9	5.78	0.48	0.9	6.07
Copthorne Common Road	0.76	3.1	10.83	0.87	6.3	18.52
Copthorne Hotel	0.01	0.0	5.76	0.01	0.0	5.77
Copthorne Road	0.55	1.2	6.33	0.71	2.3	9.97
Copthorne Way	0.72	2.5	7.38	0.81	4.0	10.66

Source: Junctions 10

3.5 Dukes Head Roundabout

Table 3.4: Dukes Head Roundabout

	Morning Peak Hour			Evening Peak hour		
	RFC	Queue	Delay	RFC	Queue	Delay
2023 Observed						
Turners Hill Road (N)	0.40	0.7	5.30	0.46	0.9	5.87
A264 Snow Hill	0.61	1.6	10.13	0.71	2.4	15.21
Turners Hill Road (S)	0.54	1.2	6.34	0.38	0.6	4.56
Copthorne Common Road	0.71	2.4	6.77	0.63	1.7	4.88
2029 with Committed Development						
Turners Hill Road (N)	0.45	0.8	6.16	0.53	1.1	6.99
A264 Snow Hill	0.69	2.2	13.07	0.84	4.6	27.79
Turners Hill Road (S)	0.60	1.5	7.44	0.44	0.8	5.20
Copthorne Common Road	0.79	3.7	9.69	0.70	2.3	5.90
2029 with Committed Development and Development						
Turners Hill Road (N)	0.47	0.9	6.56	0.58	1.4	8.30
A264 Snow Hill	0.72	2.4	14.46	0.93	9.5	56.19
Turners Hill Road (S)	0.72	2.5	10.38	0.49	0.9	5.69
Copthorne Common Road	0.83	4.5	11.58	0.75	2.9	7.20

Source: Junctions 10

3.6 Turners Hill Road / Sandy Lane Priority Junction

Table 3.5: Turners Hill Road / Sandy Lane Priority Junction

	Morning Peak Hour			Evening Peak hour		
	RFC	Queue	Delay	RFC	Queue	Delay
2023 Observed						
Sandy Lane	0.36	0.6	16.51	0.21	0.3	14.06
Turners Hill Road (S)	0.01	0.0	4.59	0.01	0.0	5.38
2029 with Committed Development						
Sandy Lane	0.40	0.7	18.24	0.24	0.3	15.54
Turners Hill Road (S)	0.01	0.0	4.53	0.02	0.0	5.34
2029 with Committed Development and Development						
Sandy Lane	0.40	0.7	18.24	0.24	0.3	15.54
Turners Hill Road (S)	0.01	0.0	4.53	0.02	0.0	5.34

Source: Junctions 10

3.7 Hophurst Lane / Sandy Lane / Vicarage Road Priority Junction

Table 3.6: Hophurst Lane / Sandy Lane / Vicarage Road Priority Junction

	Morning Peak Hour			Evening Peak hour		
	RFC	Queue	Delay	RFC	Queue	Delay
2023 Observed						
Sandy Lane	0.20	0.2	8.78	0.36	0.6	9.21
Vicarage Road	0.20	0.3	6.27	0.20	0.3	6.45
2029 with Committed Development						
Sandy Lane	0.19	0.2	7.69	0.39	0.6	9.76
Vicarage Road	0.21	0.3	6.18	0.22	0.3	6.60
2029 with Committed Development and Development						
Sandy Lane	0.20	0.2	7.86	0.39	0.6	9.87
Vicarage Road	0.21	0.3	6.19	0.22	0.3	6.62

Source: Junctions 10

3.8 Northern Site Access Junction

3.8.1 The northern access (Wychwood Place / Turners Hill Road) has been modelled with an additional 150 homes. The results are presented below.

Table 3.7: Wychwood Place / Northern Site Access Junction

	Morning Peak Hour			Evening Peak hour		
	RFC	Queue	Delay	RFC	Queue	Delay
2023 Observed						
Wychwood Place	0.06	0.1	10.66	0.02	0.0	8.81
Turners Hill Road	0.01	0.0	6.00	0.02	0.0	3.92
2029 with Committed Development						
Wychwood Place	0.07	0.1	11.20	0.03	0.0	9.22
Turners Hill Road	0.01	0.0	5.88	0.03	0.0	3.82
2029 with Committed Development and Development						
Wychwood Place	0.25	0.3	13.58	0.09	0.1	10.03
Turners Hill Road	0.07	0.1	5.10	0.23	0.9	4.06

Source: Junctions 10

3.9 Southern Site Access / Turners Hill Road / Vicarage Road Junction

3.9.1 The southern access has been modelled with 250 homes. The results are presented below.

Table 3.8: Southern Site Access / Turners Hill Road / Vicarage Road Junction

	Morning Peak Hour			Evening Peak hour		
	RFC	Queue	Delay	RFC	Queue	Delay
2029 with Committed Development						
Vicarage Road	0.50	1.0	22.02	0.24	0.3	10.90
Turners Hill Road (N)	0.00	0.0	0.00	0.00	0.0	0.00
Proposed Site Access	0.00	0.0	0.00	0.00	0.0	0.00
Turners Hill Road (S)	0.15	0.4	5.19	0.26	0.6	6.98
2029 with Committed Development and Development						
Vicarage Road	0.56	1.3	27.05	0.28	0.4	12.32
Turners Hill Road (N)	0.18	0.4	5.55	0.25	0.7	5.14
Proposed Site Access	0.08	0.1	8.65	0.10	0.1	8.55
Turners Hill Road (S)	0.16	0.4	5.23	0.	0.7	7.20

Source: Junctions 10

3.10 B2018 / B2110 North Street / East Street / Selsfield Road / Church Road Crossroad

Existing Junction

Table 3.9: B2028 / North Street / East Street / Selsfield Road / Church Road Crossroad

	Morning Peak Hour			Evening Peak hour		
	RFC	Queue	Delay	RFC	Queue	Delay
2023 Observed						
B2110 East Street	0.59	1.4	28.84	0.44	0.8	17.88
B2028 North Street	0.56	1.9	11.95	0.36	0.9	7.00
B2110 Church Road	0.97	10.6	116.17	0.96	9.7	104.23
B2028 Selsfield Road	0.09	0.2	4.77	0.04	0.1	5.33
2029 with Committed Development						
B2110 East Street	0.66	1.8	36.88	0.50	1.0	21.14
B2028 North Street	0.63	2.5	13.85	0.41	1.2	7.41
B2110 Church Road	1.08	22.3	214.15	1.09	23.3	214.09
B2028 Selsfield Road	0.10	0.2	4.68	0.05	0.1	5.23
2029 with Committed Development and Development						
B2110 East Street	0.69	2.0	40.76	0.54	1.2	23.71
B2028 North Street	0.65	2.8	14.49	0.42	1.2	7.49
B2110 Church Road	1.11	24.8	235.77	1.11	26.2	237.29
B2028 Selsfield Road	0.10	0.2	4.68	0.05	0.1	5.20

Source: Junctions 10

3.11 Model Overview

3.11.1 The junctions are expected to operate within capacity, with the exception of the B2028 / B2110 crossroad at Turners Hill. The study area is therefore able to accommodate the development traffic of an additional 100 homes to what the site is allocated for. The B2028 / B2110 crossroad is identified as operating at capacity and clearly sensitive to additional development.

3.11.2 The results are therefore consistent with the 'with development modelling' presented in the Mid Sussex Transport Study (albeit this was based on 350 homes). That study also identified the crossroad at Turners Hill as being the junction with the greatest impact. The impact was deemed severe in that report, based on its own definitions of 'severe':

- A junction with an increase in ratio of flow to capacity (RFC) of 3% or more to an RFC of 95% or more in any peak, in any Scenario; and

- An increase in average delay of 30 second or more to an average delay of two minutes or more in any peak hour, in any scenario.

3.11.3 i-Transport's experience is that a 'severe' impact will be much more substantial the above suggests. Based on appeal decisions, a 'severe impact' may be. for example:

- Where a development proposal brings about a material deterioration in the operation of the local transport network in capacity terms, i.e. it results in junctions operating over capacity for extended periods of the day; and/or
- Where there is existing queuing and delay for extended periods of the day and the development proposal will notably exacerbate existing issues; and/or
- Where a development proposal results in a material deterioration in safety; and/or
- Where there is an existing safety issue and the development proposal will have a noticeable impact.

3.11.4 This appeal experience provides examples of the high bar set by the 'severe' impact / unacceptable safety impact tests. Any future planning application should be assessed against this high bar.

3.11.5 The results of the modelling presented in this report do not identify a 'severe' traffic impact.

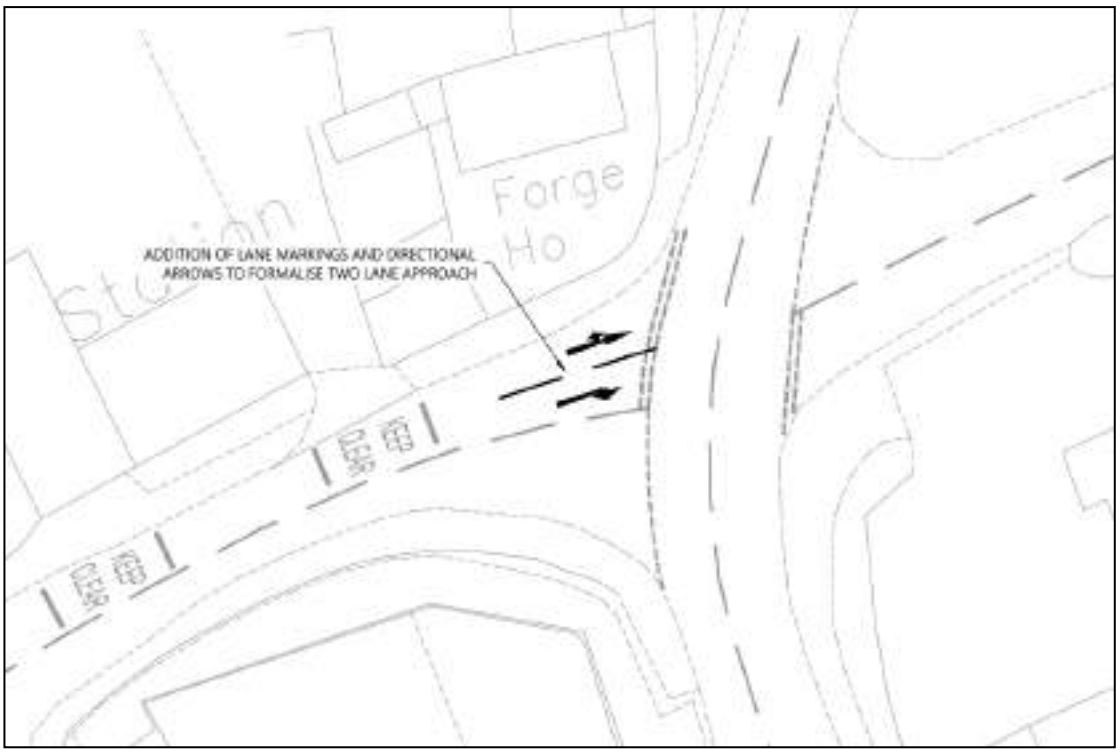
3.12 Junction Mitigation at B2110 / B2028 Crossroad

3.12.1 Whilst the impact falls short of 'severe', i-Transport accept that it would be desirable to mitigate the capacity issue at this junction and therefore has developed a potential scheme, noting that the latest version of the Mid Sussex Transport Study (Stage 5) has not done so.

3.12.2 The capacity issue at the junction is on the western (minor) arm during the morning peak, where a large amount of traffic queues to give way to the major arm. Presently, there is a wide single lane approach. Cars appear able to queue side by side but traffic is not compelled to do so. By reassigning carriageway space, a two lane approach can be provided. This will allow two vehicles to consistently enter the junction simultaneously.

3.12.3 The improvement will be provided along with directional arrows to clarify which lane is used for each turning movement. A nearside ahead/left lane and an offside right turn lane will help to evenly distribute peak hour traffic demands on the western approach. The improvement is illustrated in Drawing **ITB9155-GA-042** at **Appendix D** and illustrated below:

Image 3.2: Potential Formalisation of Lanes



3.12.4 The scheme materially improves the operation of the approach, as shown in the modelling summary table below:

Table 3.10: Summary of Junction Mitigation Operation

	Morning Peak Hour			Evening Peak hour		
	RFC	Queue	Delay	RFC	Queue	Delay
2029 with Committed Development and Development						
B2110 East Street	0.69	2.0	40.57	0.54	1.2	23.74
B2028 North Street	0.65	2.8	14.49	0.42	1.2	7.49
B2110 Church Road (Left lane)	0.80	3.1	77.14	0.91	5.1	108.25
B2110 Church Road (Right lane)	0.79	3.1	57.80	0.91	5.4	104.28
B2028 Selsfield Road	0.10	0.2	4.68	0.05	0.1	5.20

Source: Junctions 10

3.12.5 The capacity issues at the crossroad are therefore capable of resolution. Wates Developments would be willing to fund the delivery of this mitigation scheme.

3.13 Summary

3.13.1 The majority of junctions will operate within capacity.

3.13.2 However, the crossroad at Turners Hill will operate at capacity, albeit with a level of traffic impact that falls below the 'severe' test. A mitigation scheme is identified and modelled in this report, which mitigates the traffic impacts. Wates Development would be willing fund the delivery of the scheme.

3.13.3 The results are helpfully similar to those presented in the Stage 5 MSTS results, which also considers traffic impact at the B2028 / B2110 crossroad at Turners Hill to be greater than any other within the agreed study area. Whilst i-Transport does not agree that the traffic impacts there are 'severe', it is agreed that this junction more than any other would benefit from mitigation.

3.13.4 The MSTS demonstrates that the proposal can accommodate up to 350 homes without a 'severe' impact on the local highway network. This note confirms that an additional 100 homes can also be accommodated without a 'severe' impact.

3.13.5 The proposal therefore accords with paragraphs 114 (fourth bullet) and 115 of the NPPF – the proposal does not lead to a severe cumulative residual traffic impact or unacceptable impact on safety.

SECTION 4 Traffic Increases at Wychwood Place

4.1 Introduction

4.1.1 Wychwood Place now serves 67 residential dwellings:

- 23 homes were permitted immediately west of Turners Hill Road via a priority junction onto that road (*ref: application 14/02000/OUT).*
- A further 44 homes were allowed at appeal on land immediately to the south, with access via an extension of the spine road serving the 23 homes (*ref: application DM/15/3614).*

4.1.2 WSCC commented on the second application on 29 September 2015 as follows:

> ***"The LHA acknowledged that the proposed development would give rise to an increased use of the approved junction. The geometry of the new access has been considered previously and accepted by the LHA. The design (namely the type of junction, carriageway width and kerb radii) and visibility splays at the junction are appropriate to serve an additional quantum of development."*** *(ref: paragraph 2)*

4.1.3 Application DM/15/3614 sets a precedent for the expansion of Wychwood Place. This is supported by the wording of the emerging allocation itself (*ref: criterion 9 of pro-forma)*, which specifically acknowledges Wychwood Place to be one of three access points and thus capable of accommodating a material quantum of additional development.

4.1.4 During pre-application discussions with WSCC in respect of the emerging access strategy, WSCC commented as follows (*ref: PRE-14-22).*

> ***"Had it been known that additional development was to take access via Wychwood Place, more generous carriageway widths and less severe kerb radii would have been required. An access 5.5 metre wide with kerb radii of 8 metres would also have been required at the Wychwood Place access onto Turners Hill Road. This is not to say that the current widths and alignments are unacceptable, but these perhaps reflect more minimum rather than desirable requirements."*** *(ref: paragraph 3)*

4.1.5 It is agreed that the Wychwood Place / Turners Hill Road junction is forecast to operate within capacity serving additional homes above what it has permission for. New modelling in this report confirms it can accommodate 150 additional homes. The access is also capable of accommodating all service vehicles that are expected to (and already do) use it, including a weekly refuse collection vehicle. The junction is therefore expected to operate safely.

4.1.6 The focus of this section is not on the Wychwood Place / Turners Hill access junction but the access road itself within the first application site. The main spine road through the first application site is approximately 5m wide with a 13m centre line radius bend.

4.1.7 This section therefore assesses the suitability of the carriageway and the bend to accommodate the traffic of additional houses. This assessment has been undertaken on the basis of WSCC's adopted 'Local Design Guide', which directs designers towards Manual for Streets.

4.2 Design Guidance in Manual for Streets

4.2.1 Figure 7.1 of Manual for Streets provides guidance on street widths:

- 4.1m will enable two cars to pass one another.
- 4.8m is wide enough for a car and HGV to pass on a straight section of road.

4.2.2 Paragraph 6.8.1 concerns geometric provision for service vehicles:

> ***"The design of local roads should accommodate service vehicles without allowing their requirements to dominate the layout. On streets with low traffic flows and speeds, it may be assumed that they will be able to use the full width of the carriageway to manoeuvre."***

4.2.3 Paragraph 6.8.6, relating to waste collection, states:

> ***"While it is always possible to design new streets to take the largest vehicle that could be manufactured, this would conflict with the desire to create quality places."***

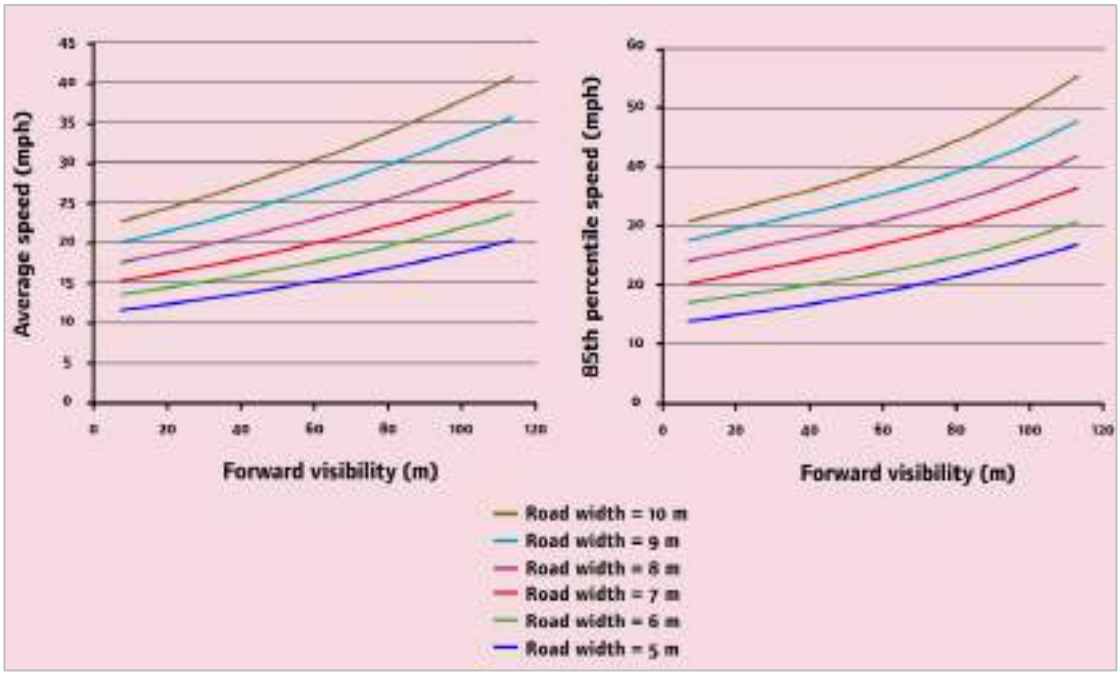
4.2.4 Paragraph 6.8.7 recommends a minimum width of 5m to enable refuse vehicles to pass cars but notes that narrower widths are acceptable where street parking is discouraged.

4.2.5 MfS also provides helpful guidance on forward visibility: Paragraph 7.4.4 states:

> ***"Research carried out in preparation of MfS found that reductions in forward visibility are associated with reduced driving speeds."***

4.2.6 That research (presented in full in TRL Research Report 661) is summarised on page 89 of MfS and is clear that greater visibility (and indeed road width) is associated with increased vehicle speed:

Image 4.1: The Relationship Between Speed and Forward Visibility



4.2.7 The design guidance therefore confirms that a 5m wide access road is acceptable where off street parking is proposed and will enable cars and occasional HGVs to pass on straight sections. WSCC's earlier pre-application responses note that the carriageway width is towards the minimum that would be accepted by WSCC, but it not unacceptable.

4.2.8 The bend within the site is also 5m wide. This can be accepted provided traffic flows are to remain suitably low.

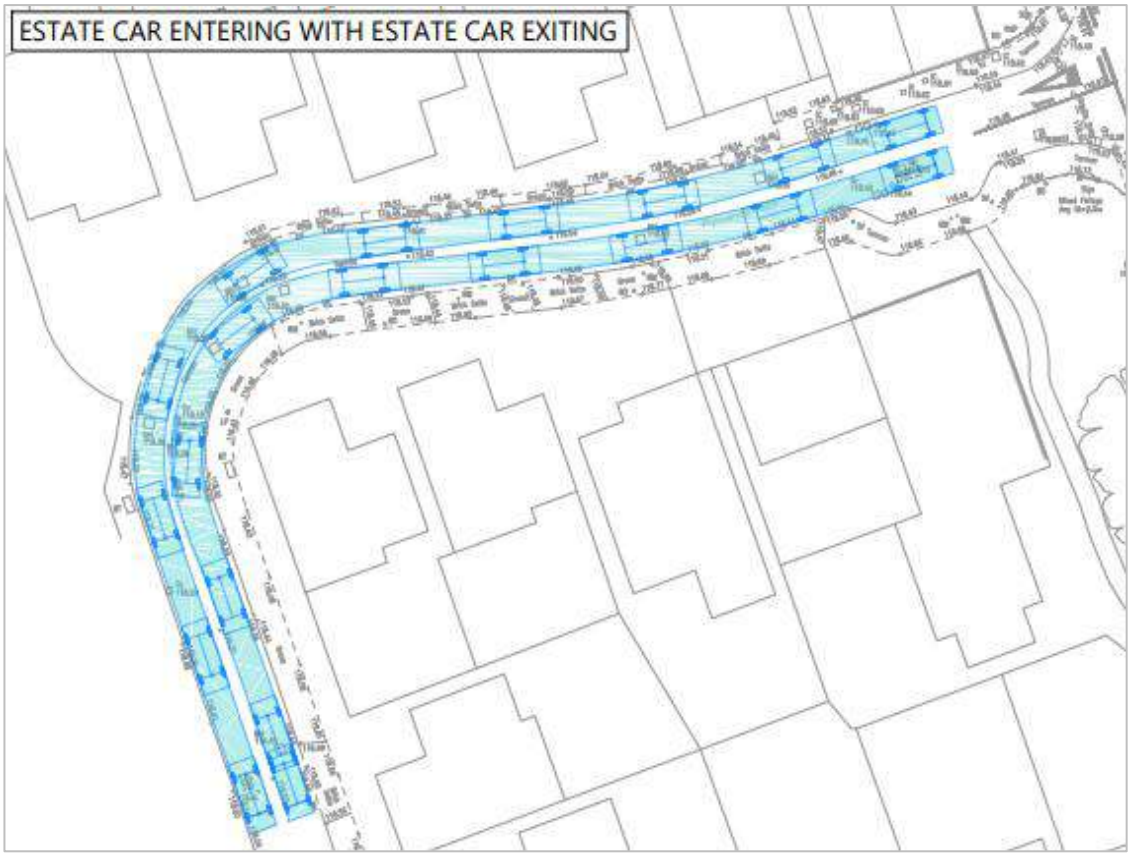
4.2.9 The remainder of this section therefore considers the bend in this context:

- The ability of vehicles to pass one another on the bend.
- Forward visibility on the bend.
- Traffic flows on the access road.
- The likelihood of vehicles being on or passing one another on the bend.

4.3 The Ability of Vehicles to Pass One Another on the Bend

4.3.1 Drawing **ITB9155-GA-049A** at **Appendix E** shows that two estate cars can pass one another on the bend.

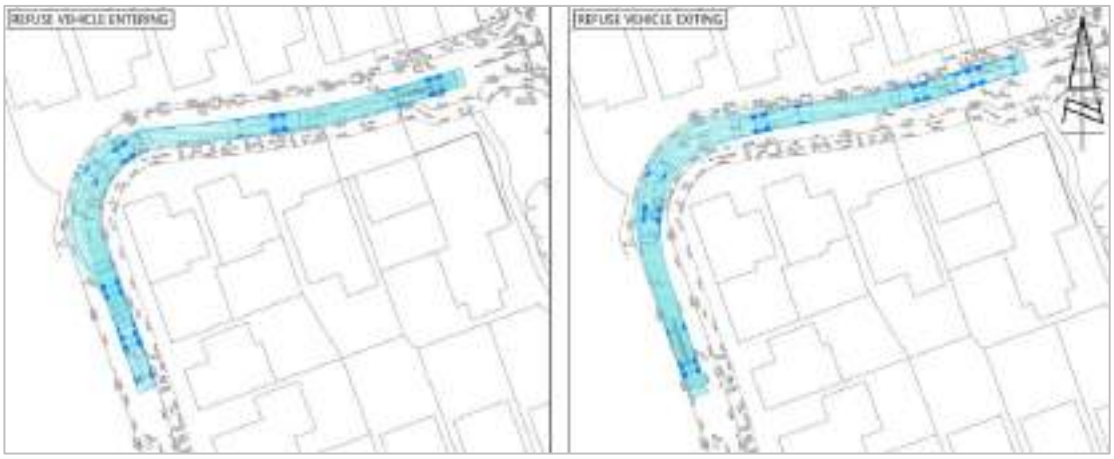
Image 4.2: Estate Cars Passing One Another



4.3.2 The majority of development traffic will be able to pass along the bend comfortably.

4.3.3 A refuse vehicle is also able to pass along the bend (and indeed already does so) albeit crossing the centre of the road:

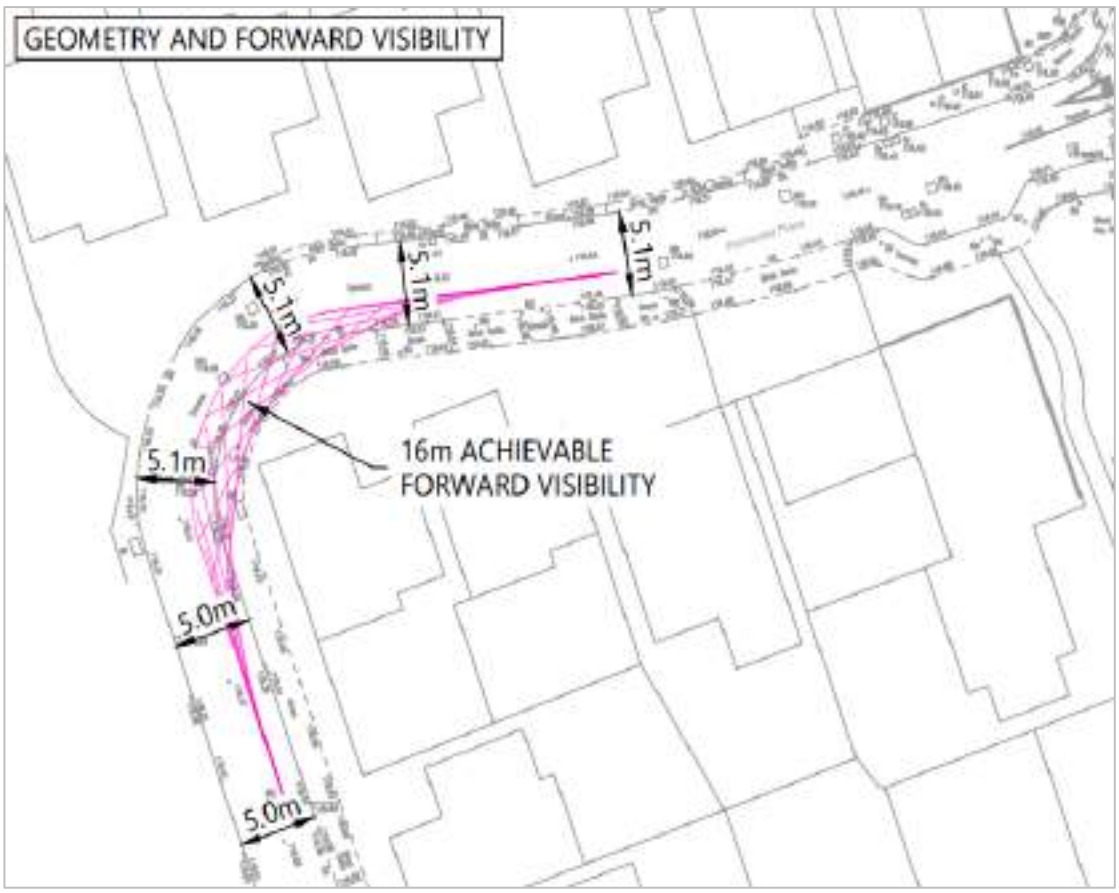
Image 4.3: Refuse Vehicle Using Access



4.4 Forward visibility on the bend

4.4.1 A forward visibility envelope of 16m is achievable along the bend in a westbound (inbound) direction:

Image 4.4: Forward Visibility Envelope



4.4.2 This provides sufficient stopping site distance for a car travelling at 14mph. The line graphs presented in MfS (*ref: image 4.1)* show that forward visibility of 16 metres on a 5m wide road yields an 85th percentile speed of around 12mph. There is therefore adequate forward visibility on the bend for a vehicle to stop in the event of encountering a vehicle overrunning the centre line. The following paragraphs consider the likelihood of this occurring.

4.5 Traffic Flows on The Access Road

4.5.1 Using the agreed trip rates, the daily (07:00-21:00 hours) the traffic flows of both the existing 67 home site and when serving an additional 150 homes is summarised in **Table 4.1** below. The agreed trip rates are presented in **Appendix F**.

Table 4.1: Agreed Trip Rates and Traffic Flows of Existing Access Road and Serving 150 Additional Homes

	Daily Traffic Flow (0700-2100 hours)		
	In	Out	2-way
Trip Rate	2.399	2.421	4.82
Trip Generation (existing 67 homes)	161	162	323
Trip Generation (existing 67 homes plus 150 homes)	521	525	1046

Source: TRICS

4.5.2 This equates to the following average vehicle demands per hour and headways in minutes per vehicle.

Table 4.2 Vehicle Demands Per Hour

	Daily Traffic Flow (0700-2100 hours)		
	In	Out	2-way
Trip Generation (existing 67 homes)	11	12	23
Trip Generation (existing 67 homes plus 150 homes)	37	38	75

Source: Consultant

Table 4.3: Vehicle Headways (vehicles per minute)

	Daily Traffic Flow (0700-2100 hours)		
	In	Out	2-way
Trip Generation (existing 67 homes)	5.2	5.2	2.6
Trip Generation (existing 67 homes plus 150 homes)	1.6	1.6	0.8

Source: Consultant

4.5.3 Vehicle demands are therefore low and will remain so with the additional homes, with typical headways / gaps between vehicles of around 50 seconds (0.8 minutes).

4.6 The Likelihood of Vehicles Being on or Passing One Another on the Bend

4.6.1 The bend is approximately 24 metres long. Based on the calculated 85th percentile speed of 12 mph (5.36 m/s) set out above, each vehicle will be on the bend for just under 4.5 seconds.

4.6.2 On this basis, at the current time, the likelihood of a vehicle being on the bend is 2.9%[5] (i.e. there is already a small chance, which has been accepted). With an additional 150 homes, this increases to 9.3%[6].

4.6.3 However, the chances of a vehicle being on that bend and encountering another vehicle are significantly lower than this. In any event, the majority of vehicles are cars, which are able to pass one another.

4.6.4 Updated multi-modal trip rates for private housing, obtained using the same selection parameters as those agreed with WSCC[7] (and provided at **Appendix G)** confirm that 0.8% of vehicles are heavy goods vehicles. The likelihood of a heavy goods vehicle being on the bend with an additional 150 homes is therefore just 0.07%[8]. The likelihood of a car encountering such a vehicle is therefore even smaller than this.

4.6.5 Against this background, the access road is compliant with the WSCC Local Design Guidance and Manual for Streets because it:

1. Meets WSCC's geometric standards for adoption as highway (consistently meeting minimum criteria with much of the access road to the allocation site exceeding minima).
2. Enables the passage of typically expected vehicles.
3. Accommodate services vehicles without allowing their requirements to dominate the layout.
4. Allows larger vehicles to use the full carriageway widths (noting that that traffic flow will remain low). The likelihood of a vehicle encountering another vehicle at this time is, and will remain, vanishingly small.
5. Achieves appropriate forward visibility for 85th percentile speeds.

[5] 323 vehicles x 4.47 seconds = 1,446 seconds when a vehicle is on the bend. Out of 50,400 seconds during the 14 hour period this equates to 2.9% (1,446 / 50,400 x 100 = 2.9%)

[6] 1,046 vehicles x 4.47 seconds = 4,683 seconds when a vehicle is on the bend. Out of 50,400 seconds during the 14 hour period this equates to 9.3% (4,683 / 50,400 x 100 = 9.3%)

[7] Based on privately owned houses in England, excluding London, weekday surveys, suburban area, and edge of town. Sites pre-date the COVID-19 pandemic and are therefore robust.

[8] 9.3% x 0.8% = 0.07%

4.7 Summary

4.7.1 The NPPF sets a very high bar for the circumstances under which a refusal on traffic impact grounds is warranted – i.e. only when traffic impacts are deemed severe and safety impacts are 'unacceptable'. This high bar is not breached by the proposal.

4.7.2 This access has already been constructed and planning permission twice granted for a material number of homes. The District Plan allocation criteria specifies Wychwood Place as one of three accesses and therefore envisages a material share of the 350 home allocation being provided via Wychwood Place.

4.7.3 The risk of a vehicle encountering another vehicle overrunning the centreline at the present time is extremely small.

4.7.4 The evidence above sets out that, even with 150 additional homes, the likelihood of a vehicle being on the bend will remain low. The likelihood of encountering another vehicle will be much lower and the likelihood of encountering a HGV extremely low. There will not be an unacceptable safety impact on Wychwood Place.

4.7.5 Agreement is sought from WSCC that the intensification of Wychwood Place for up to 150 homes is acceptable.

SECTION 5 Summary

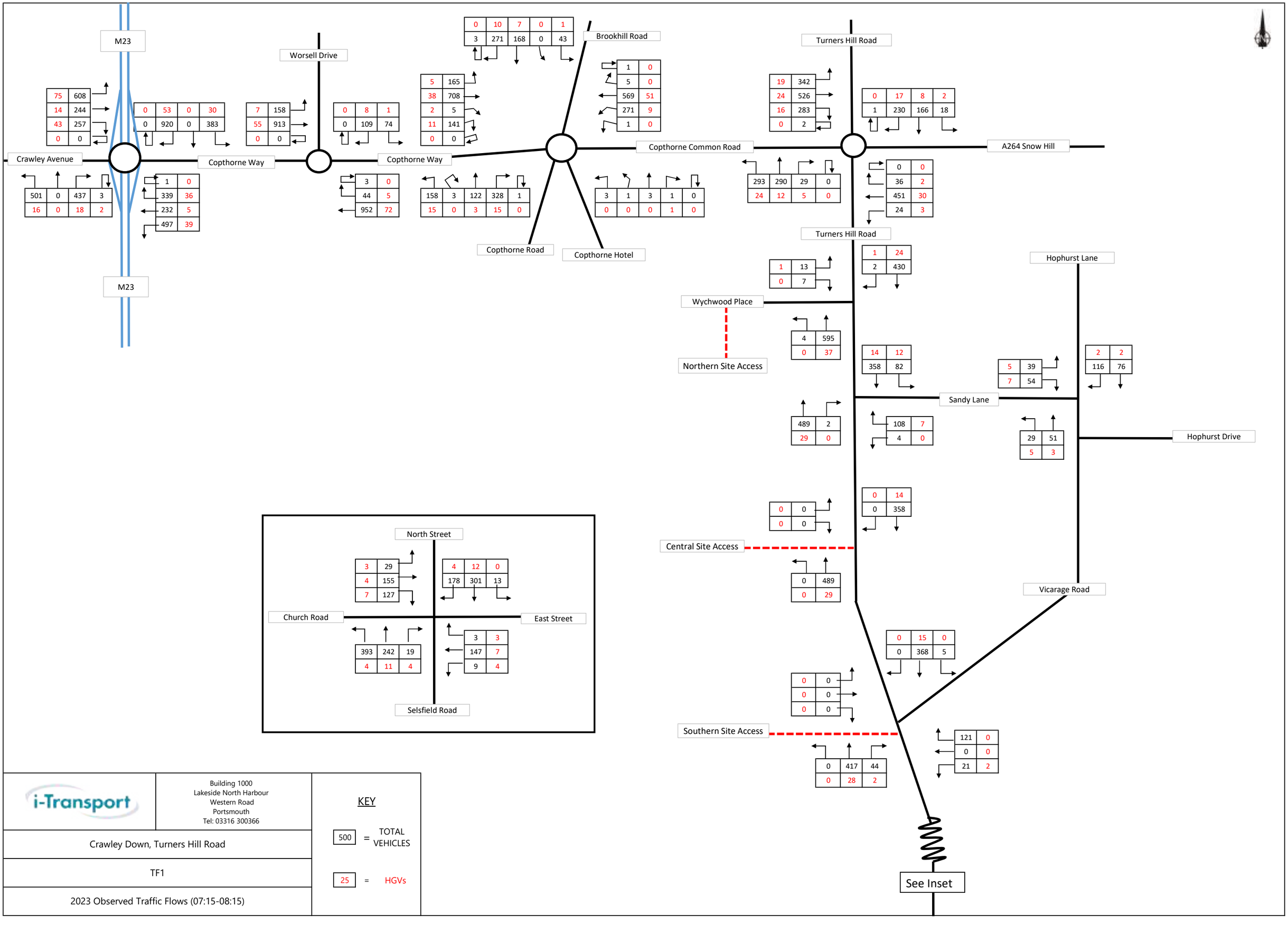
5.1 This Scoping Note provides further traffic assessment of the impact of development on land at Turners Hill Road, Crawley Down on the local highway network and the emerging northern site access road, Wychwood Place.

5.2 Agreement is sought from WSCC that:

- The parameters of the traffic modelling exercise are acceptable (subject to confirmation of committed development).
- The proposal will not result in a material (let alone 'severe') traffic impact on the agreed study area, with the one exception being the B2028 / B2110 crossroad at Turners Hill.
- The traffic impact at that junction can be acceptably mitigated with a flared two lane approach (by reassigning land in the carriageway) and Wates Developments would be willing to make a reasonable and proportionate financial contribution towards the improvement presented in this report or any other similar improvement subsequently developed.
- The results are broadly consistent with the findings of the MSTS.
- The intensification of Wychwood Place for up to 150 homes is acceptable given that the junction meets WSCC's design standards and accords with Manual for Streets. It also accords with the criteria of the emerging allocation (which specifically identifies Wychwood Place as one of three access points).

5.3 Agreement is sought that a development of 450 homes on land at Turners Hill Road accords with paragraphs 114 and 115 of then NPPF – the significant impacts of the development can be cost-effectively mitigated and there will not be a severe residual cumulative traffic impact, nor unacceptable safety impacts.

FIGURES

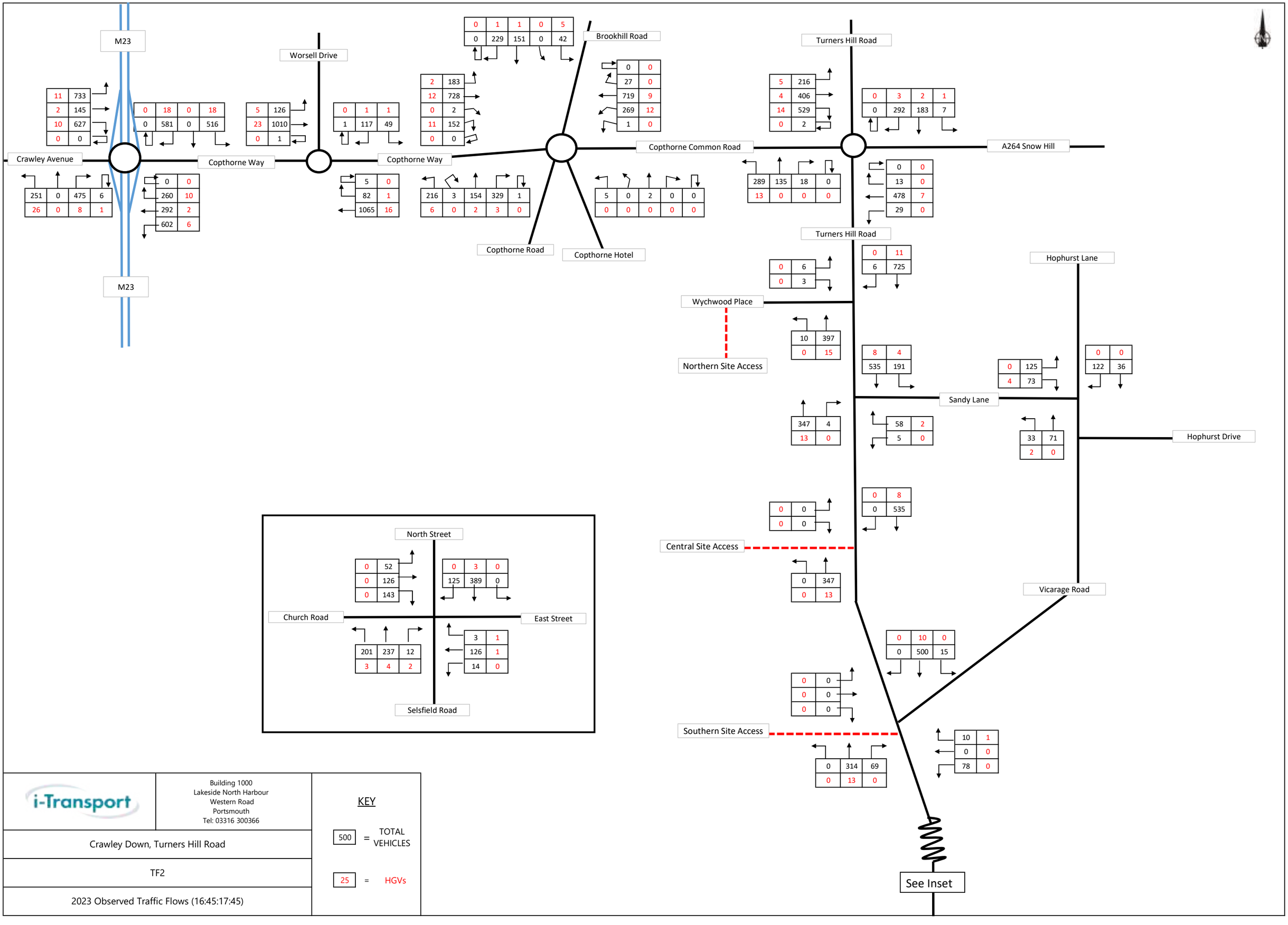


i-Transport	Building 1000 Lakeside North Harbour Western Road Portsmouth Tel: 03316 300366
Crawley Down, Turners Hill Road	
TF1	
2023 Observed Traffic Flows (07:15-08:15)	

KEY

500 = TOTAL VEHICLES

25 = HGVs

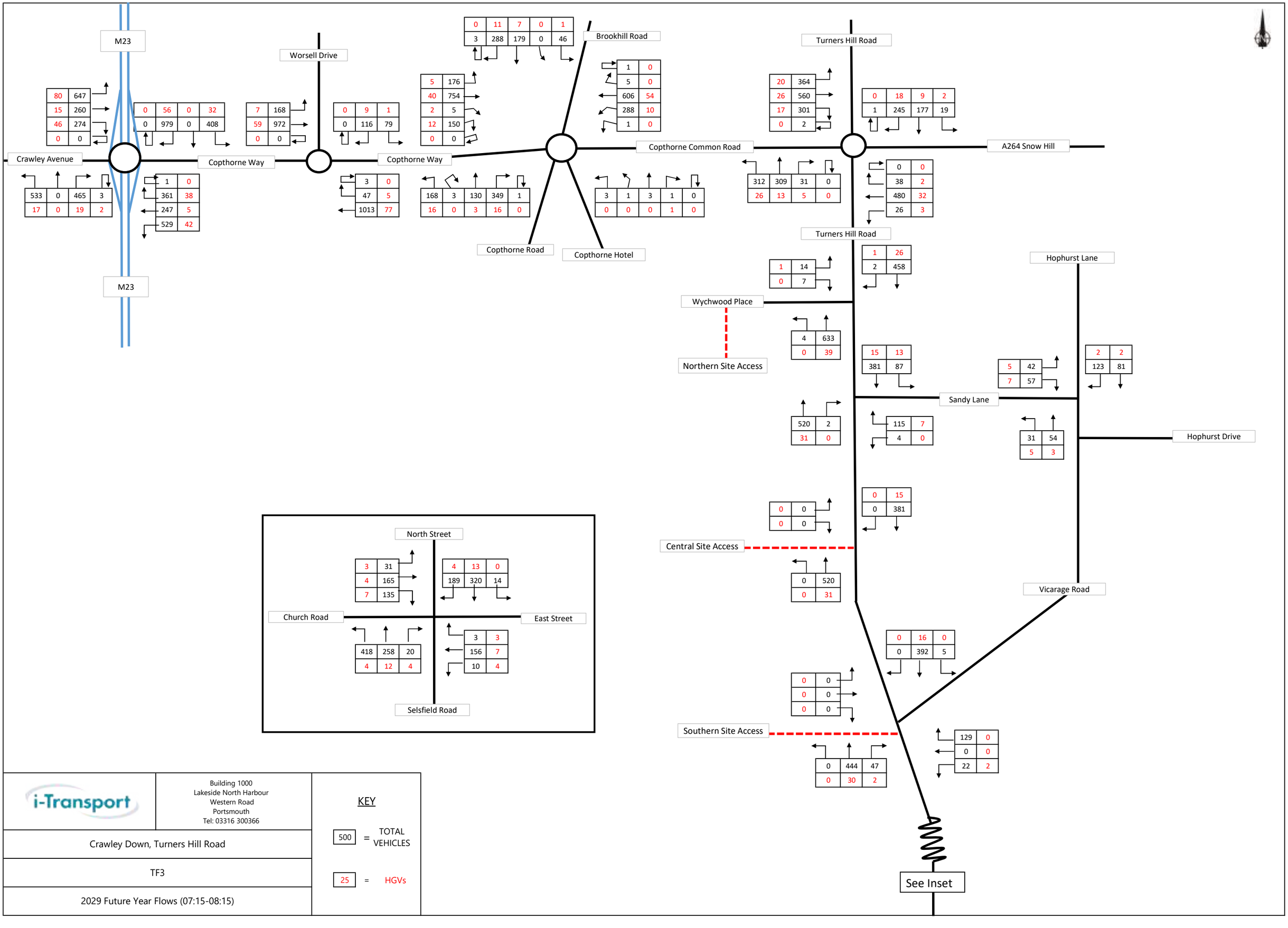


i-Transport	Building 1000 Lakeside North Harbour Western Road Portsmouth Tel: 03316 300366
Crawley Down, Turners Hill Road	
TF2	
2023 Observed Traffic Flows (16:45:17:45)	

KEY

500 = TOTAL VEHICLES

25 = HGVs

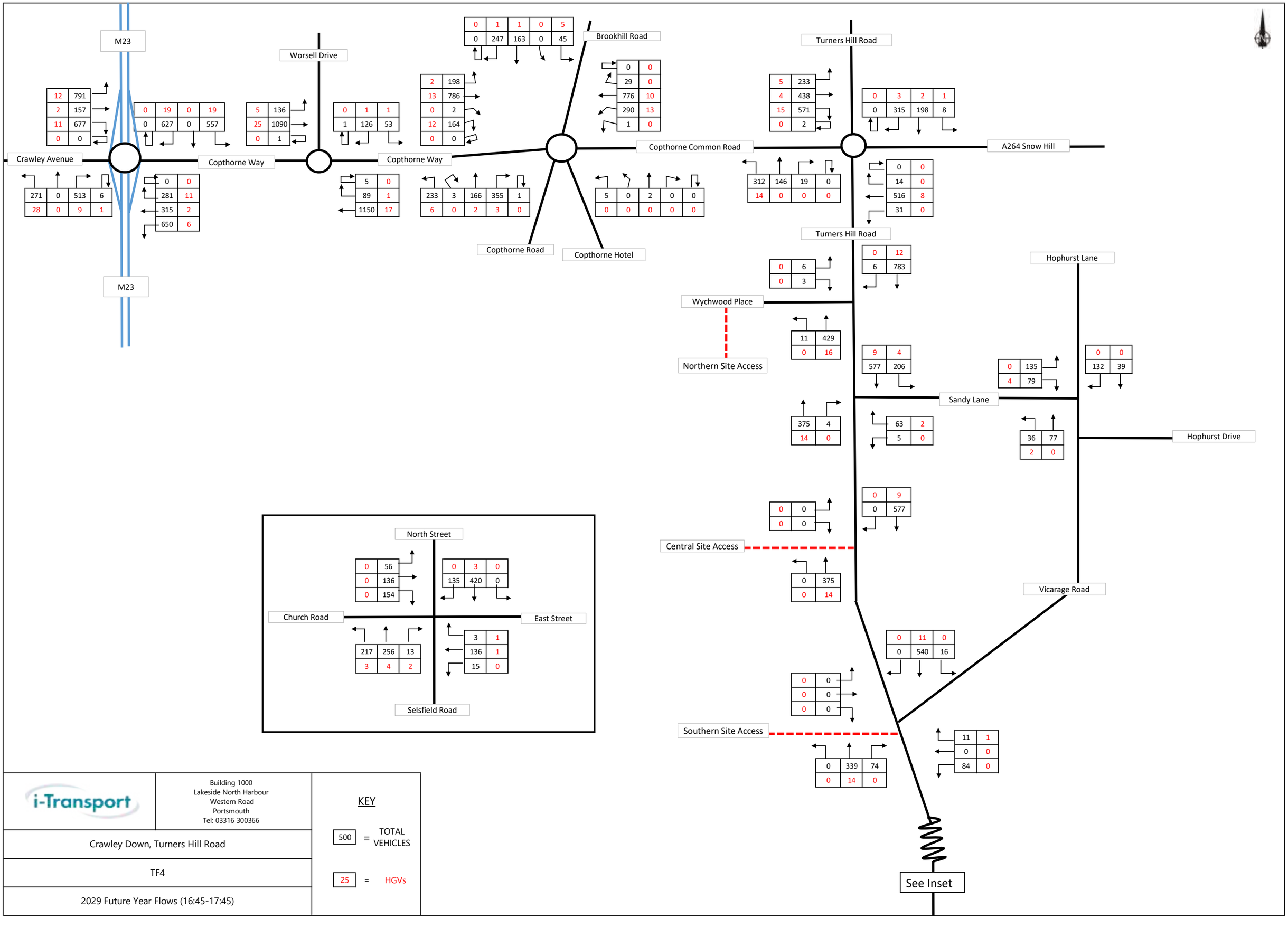


i-Transport	Building 1000 Lakeside North Harbour Western Road Portsmouth Tel: 03316 300366
Crawley Down, Turners Hill Road	
TF3	
2029 Future Year Flows (07:15-08:15)	

KEY

500 = TOTAL VEHICLES

25 = HGVs

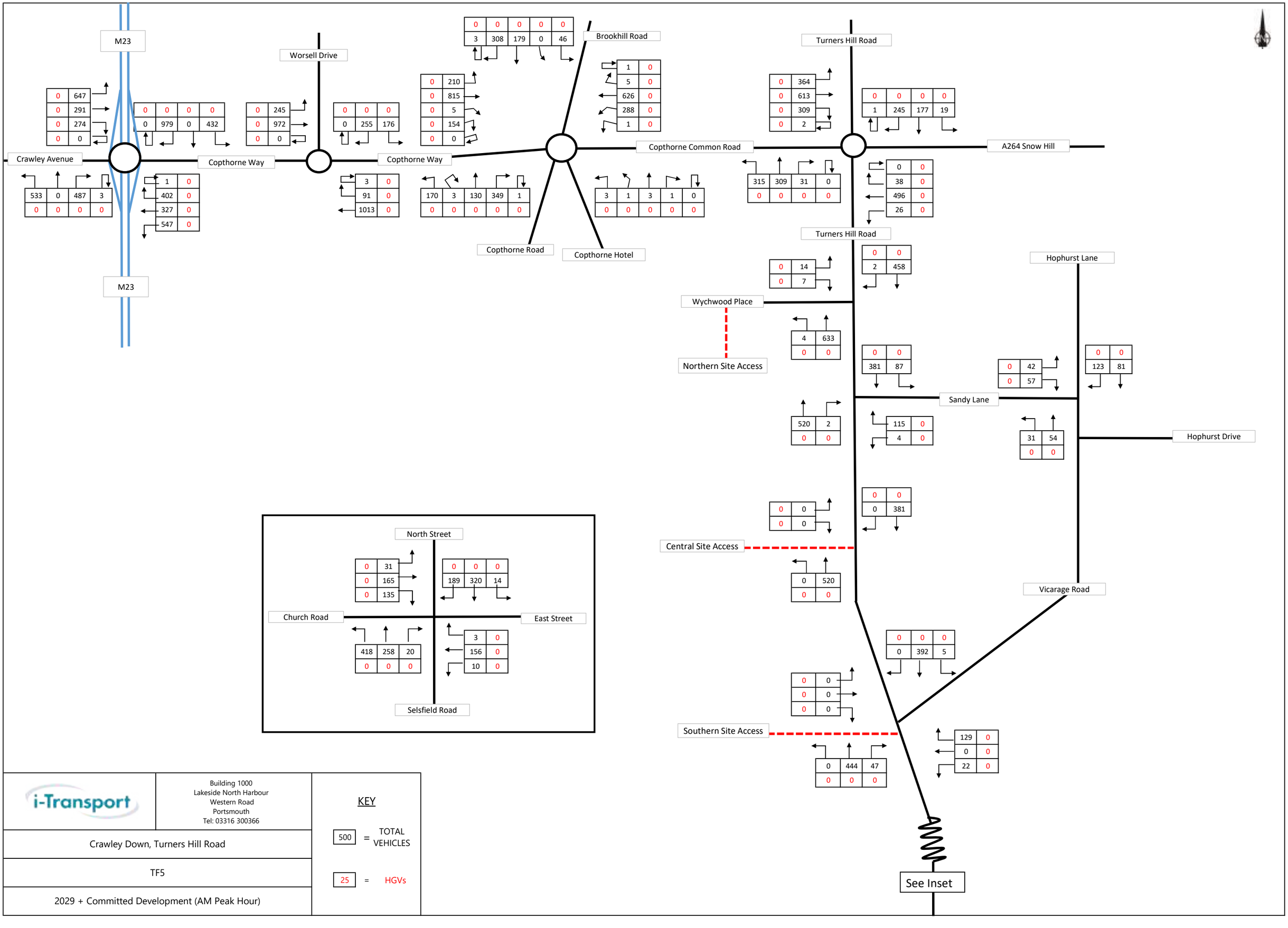


i-Transport	Building 1000 Lakeside North Harbour Western Road Portsmouth Tel: 03316 300366
Crawley Down, Turners Hill Road	
TF4	
2029 Future Year Flows (16:45-17:45)	

KEY

500 = TOTAL VEHICLES

25 = HGVs

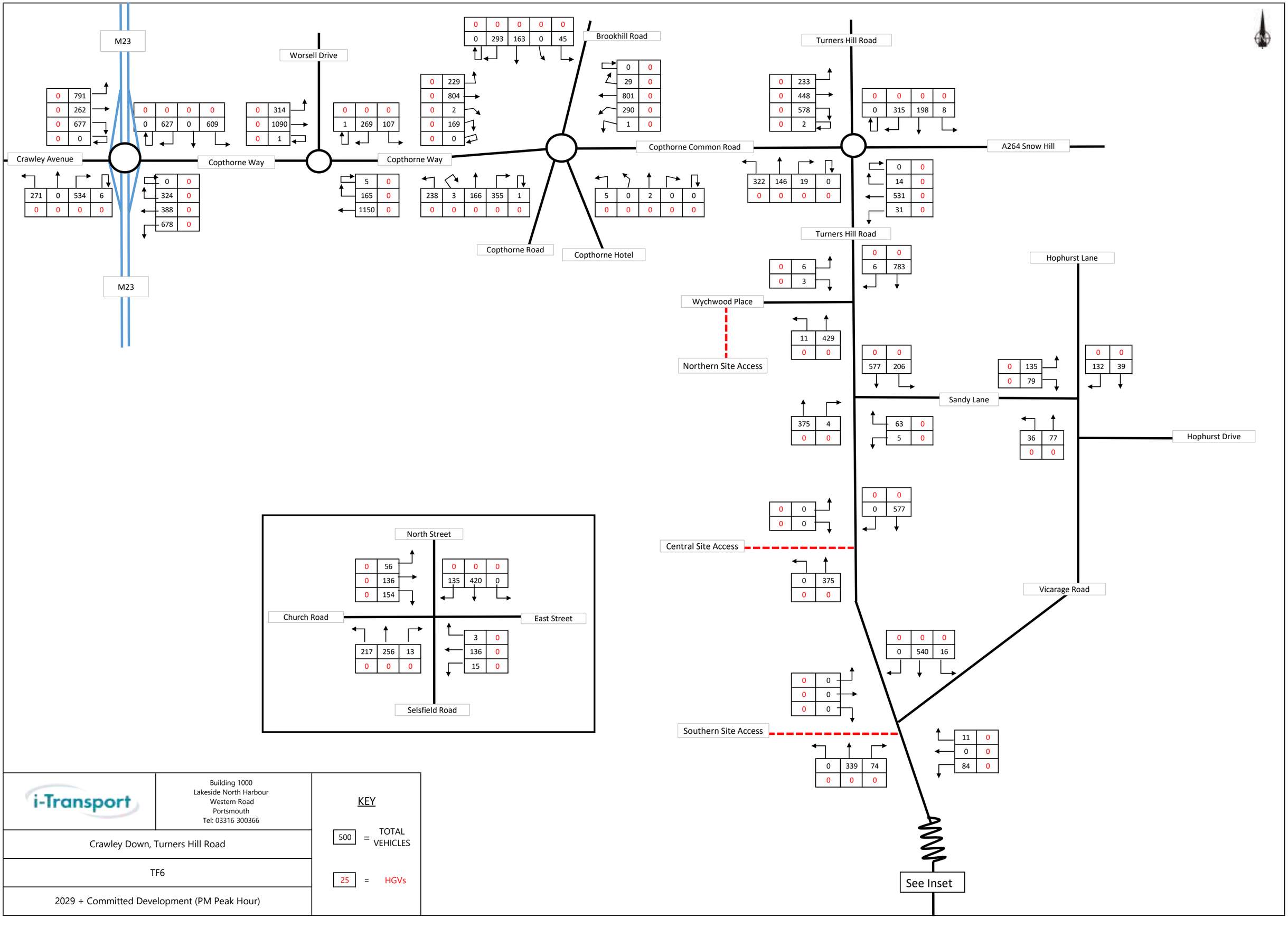


i-Transport	Building 1000 Lakeside North Harbour Western Road Portsmouth Tel: 03316 300366
Crawley Down, Turners Hill Road	
TF5	
2029 + Committed Development (AM Peak Hour)	

KEY

500 = TOTAL VEHICLES

25 = HGVs

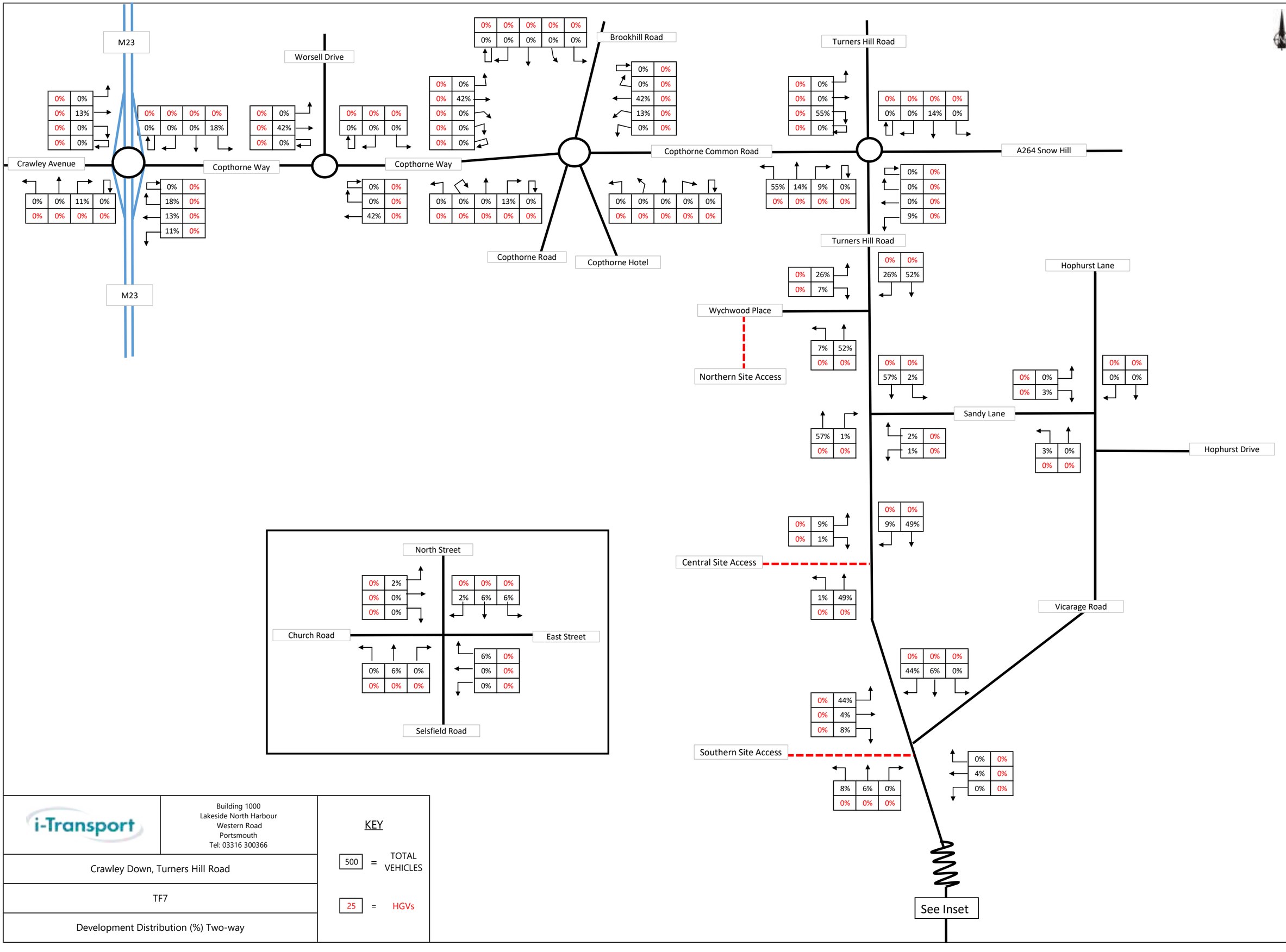


i-Transport	Building 1000 Lakeside North Harbour Western Road Portsmouth Tel: 03316 300366
Crawley Down, Turners Hill Road	
TF6	
2029 + Committed Development (PM Peak Hour)	

KEY

500 = TOTAL VEHICLES

25 = HGVs

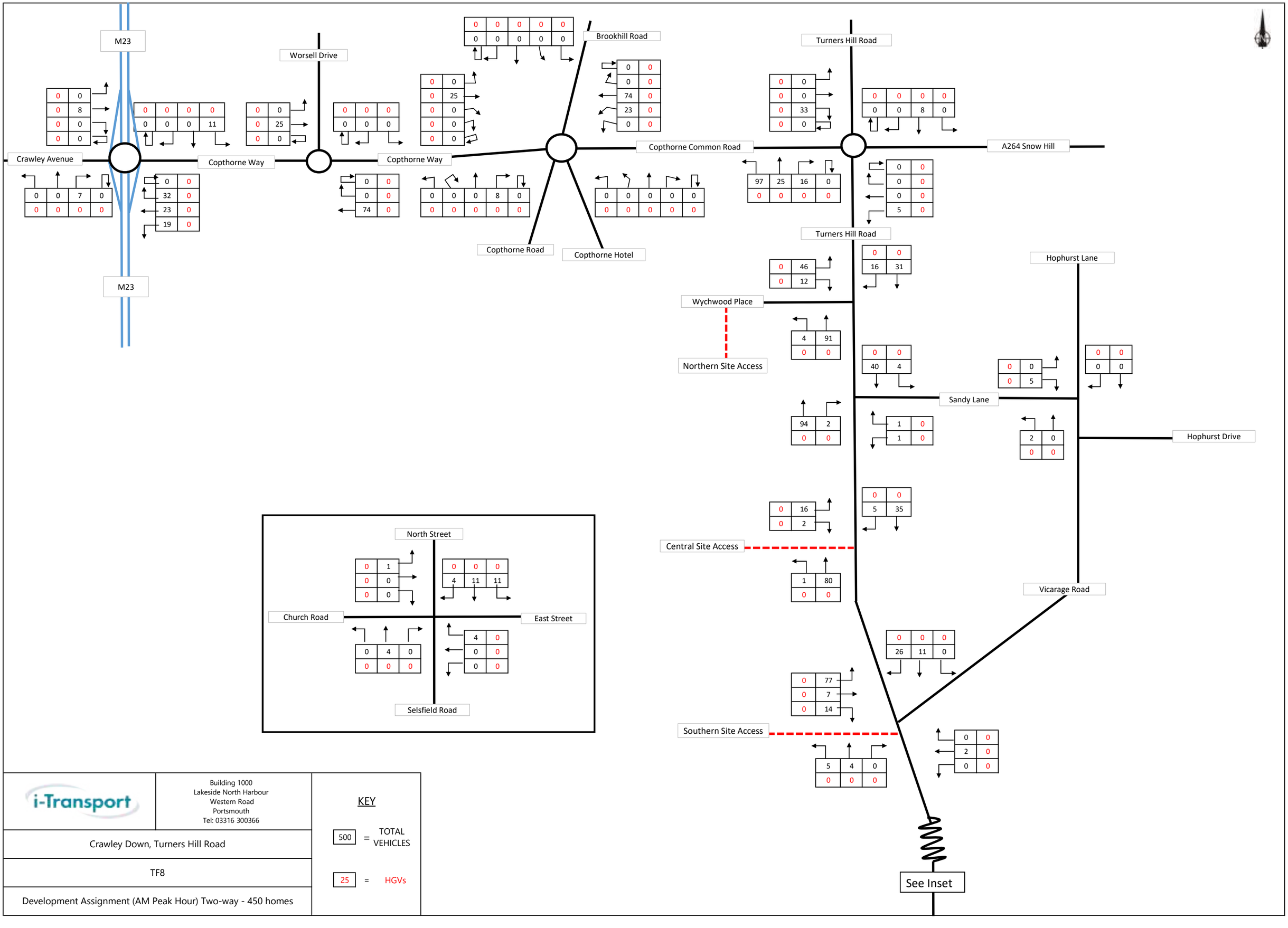


i-Transport	Building 1000 Lakeside North Harbour Western Road Portsmouth Tel: 03316 300366
Crawley Down, Turners Hill Road	
TF7	
Development Distribution (%) Two-way	

KEY

500 = TOTAL VEHICLES

25 = HGVs

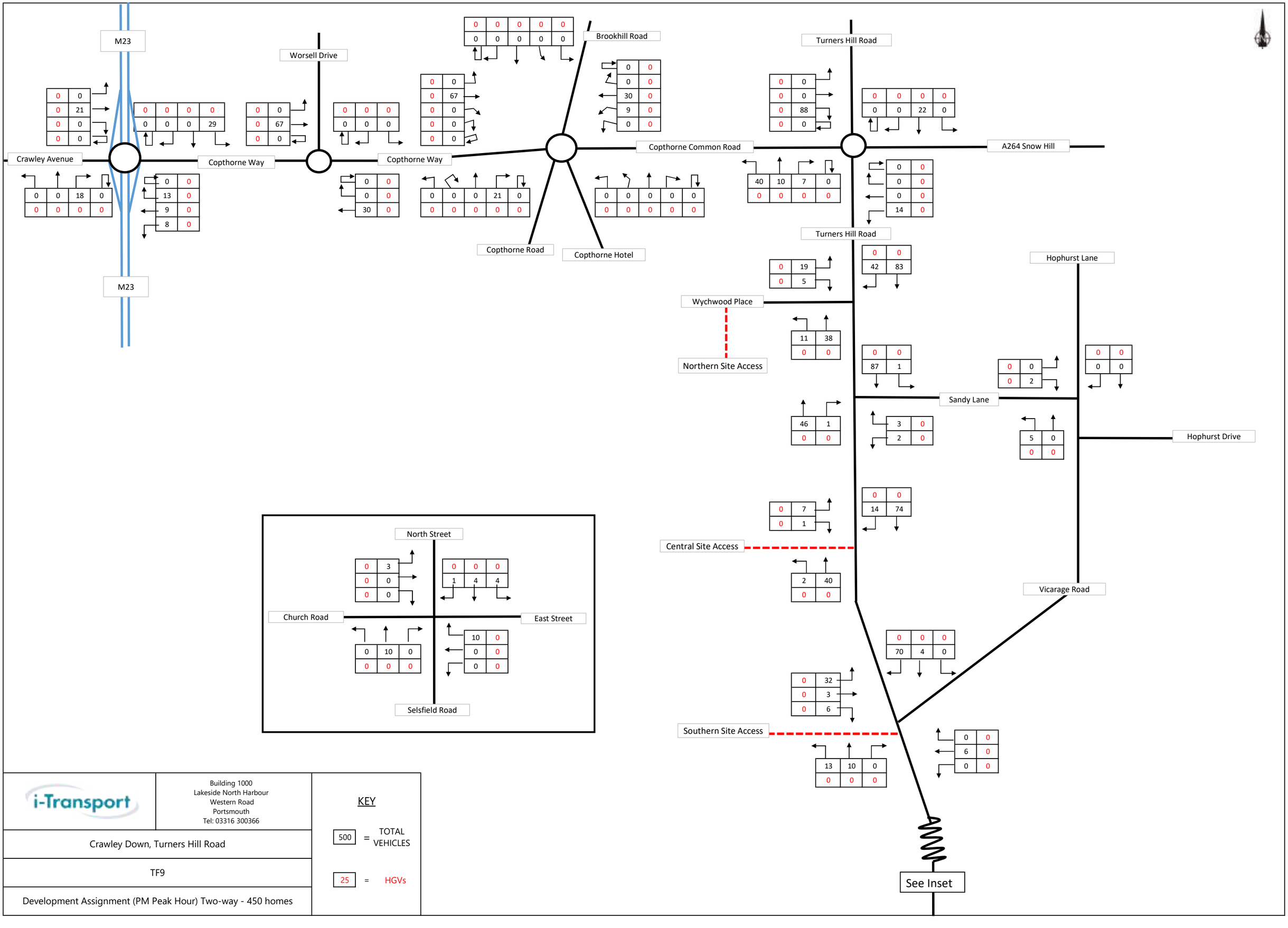


i-Transport	Building 1000 Lakeside North Harbour Western Road Portsmouth Tel: 03316 300366
Crawley Down, Turners Hill Road	
TF8	
Development Assignment (AM Peak Hour) Two-way - 450 homes	

KEY

500 = TOTAL VEHICLES

25 = HGVs

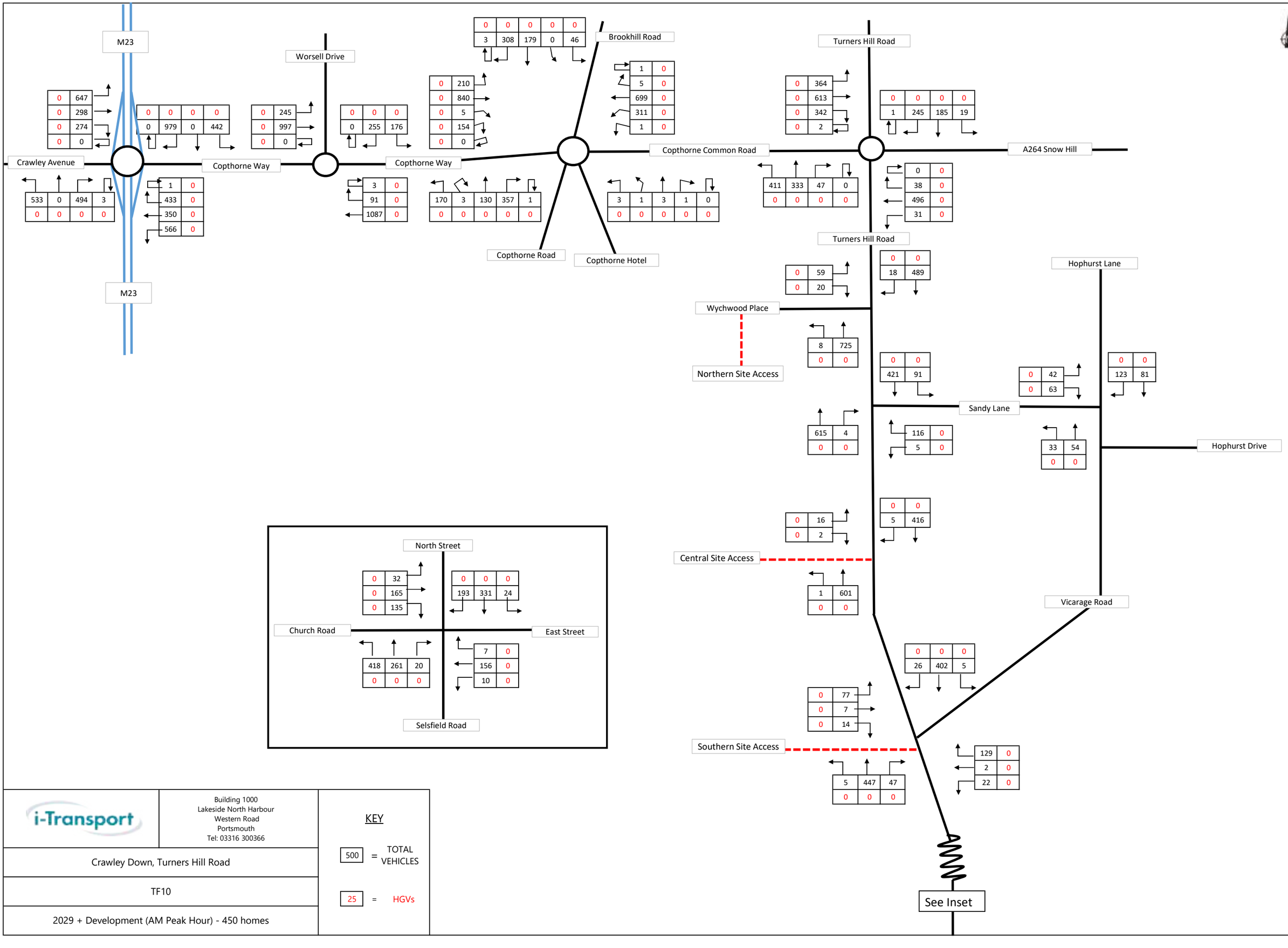


i-Transport	Building 1000 Lakeside North Harbour Western Road Portsmouth Tel: 03316 300366
Crawley Down, Turners Hill Road	
TF9	
Development Assignment (PM Peak Hour) Two-way - 450 homes	

KEY

500 = TOTAL VEHICLES

25 = HGVs

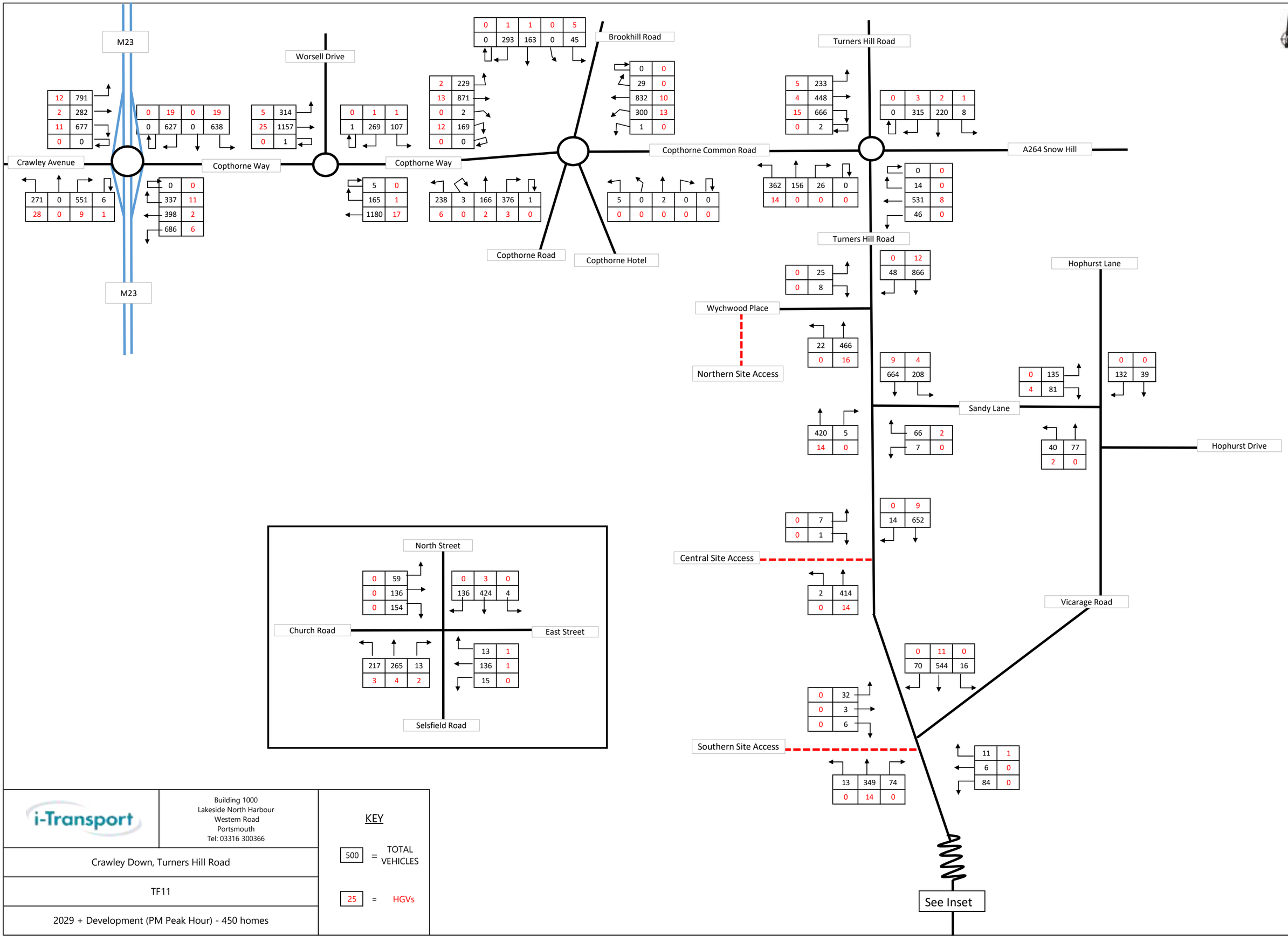


i-Transport	Building 1000 Lakeside North Harbour Western Road Portsmouth Tel: 03316 300366
Crawley Down, Turners Hill Road	
TF10	
2029 + Development (AM Peak Hour) - 450 homes	

KEY

500 = TOTAL VEHICLES

25 = HGVs



i-Transport	Building 1000 Lakeside North Harbour Western Road Portsmouth Tel: 03316 300366
Crawley Down, Turners Hill Road	
TF11	
2029 + Development (PM Peak Hour) - 450 homes	

KEY

500 = TOTAL VEHICLES

25 = HGVs

APPENDIX A. WSCC'S CONSULTATION RESPONSE

WEST SUSSEX COUNTY COUNCIL
PRE APPLICATION CONSULTATION

TO:	Organisation:i-transport FAO: Prabin Limbu
FROM:	WSCC - Highways Authority
DATE:	12 January 2023
LOCATION:	Land West of Turners Hill Road Crawley Down RH10 4HN
SUBJECT:	Internal Reference: PRE-111-22 Residential led mixed use, details in the attached Scoping Note. Proposed number of dwellings: 450
DATE OF SITE VISIT:	n/a
RECOMMENDATION:	Advice
S106 CONTRIBUTION TOTAL:	n/a

The Highways Authority has been consulted for pre-application advice in regard to the proposed development at Land West of Turners Hill Road, Crawley Down, RH10 4HN.

Comments are made in respects of,

- 450 Home Promotion Scoping Note, reference MS/PL/ITB9155-038 TN, dated 23rd December 2022

In reviewing the current enquiry, it's recognised that several separate pre application enquiries have been submitted that relate to the development west of Turners Hill Road. In summary,

- PRE-14-22 – Initial enquiry containing access strategy and details for northern and central access.
- PRE-38-22 – Signalisation of proposed southern access
- PRE-49-22 – Meeting to discuss WSCC comments made through PRE-38-22
- PRE-79-22 – Alternate design options for southern access

It's recognised that a number of the principles set out within the latest enquiry effectively continue on those established in the earlier enquiries.

Section 2 – In principle, it's acknowledged that the development site lies within reasonable walking and cycling distance of those existing services within Crawley Down. There are also several bus services that could provide access to nearby towns.

As part of any future transport assessment, it will be expected that,

- An additional walking/cycling time and distance assessment is made from the centres of the northern and southern parcels respectively. This is sought as given the nature of the site, the distance from the southern parcel to those facilities to the north of Crawley Down (and likewise for the northern parcel to the facilities in the south of Crawley Down) will inevitably vary.

- A further assessment is made of the nature of walking and cycling routes from the development to nearby services in Crawley Down; this is particularly pertinent for cycling given the lack of dedicated infrastructure in the surrounding area. This assessment should reflect the different walking/cycling routes that would be used by residents within the different development parcels.

- Details are included in terms of journey times by passenger transport to likely nearby destinations (i.e. East Grinstead and Crawley) to demonstrate that the use of bus is realistic.

- An assessment is made of passenger waiting facilities and potential improvements identified for the nearest bus stops to the development.

2.4.2 – With regards to the matters listed, with the exception of physical passenger transport infrastructure, any service enhancements would need to be discussed and agreed with the respective operator. Likewise, the provision of a car club should be agreed in principle with a respective operator.

3.1.1 – The access strategy has been presented through the earlier pre application enquiries. Whilst the number of dwellings is proposed to increase, is noted that the access strategy remains unchanged.

3.1.2 – WSCC Highways have expressed views on the access junctions. With the northern access, which has been built, various comments were made as part of PRE-14-22 regarding the access geometry and the suitability of this to accommodate additional traffic. Those comments remain applicable.

3.2.1 – As per the comments in 3.1.2, views have been expressed previously regarding the suitability of the existing northern access to accommodate the additional traffic.

3.2.3 – Notwithstanding the comments regarding the design, it's acknowledged that the junction would work within theoretical capacity with the additional development.

3.3.4 – It's noted that the central access is expected to serve a much lower number of dwellings than originally planned.

3.4.4 - It's noted that the southern access is expected to serve a lower number dwellings than originally indicated, and that as such (and as shown in table 3.3) the junction is expected to operate within theoretical capacity.

4.2.1 – It's recognised that the trip rates have been agreed previously. These remain acceptable for the purposes of the increase in dwellings.

4.4.1 – At this stage, it would be useful to have details of the vehicular trip distribution presented in network diagrams. The extent of any junction assessments can then be agreed. It is recognised that the additional 100 dwellings are unlikely to substantially change the extent of any modelling work compared with the 350 dwelling scheme, however this would need to be demonstrated.

4.4.2 to 4.4.9 – The various comments regarding the MSDC modelling are acknowledged. For the purposes of any planning application, it would still be for the supporting transport assessment to demonstrate that the proposal would not result in any unacceptable safety impacts or otherwise severe impacts as set out within the National Planning Policy Framework.

4.4.10 – Whilst there may be very limited difference between a 350 and 450 dwelling proposal, this hasn't been demonstrated for junctions across the wider highway network; this would be a matter for the TA to demonstrate.

4.5.5 – In principle, the increase in the number of dwellings is unlikely to have any material impacts. This is a matter that would need to be suitably tested through any subsequent MSDC Local Plan modelling.

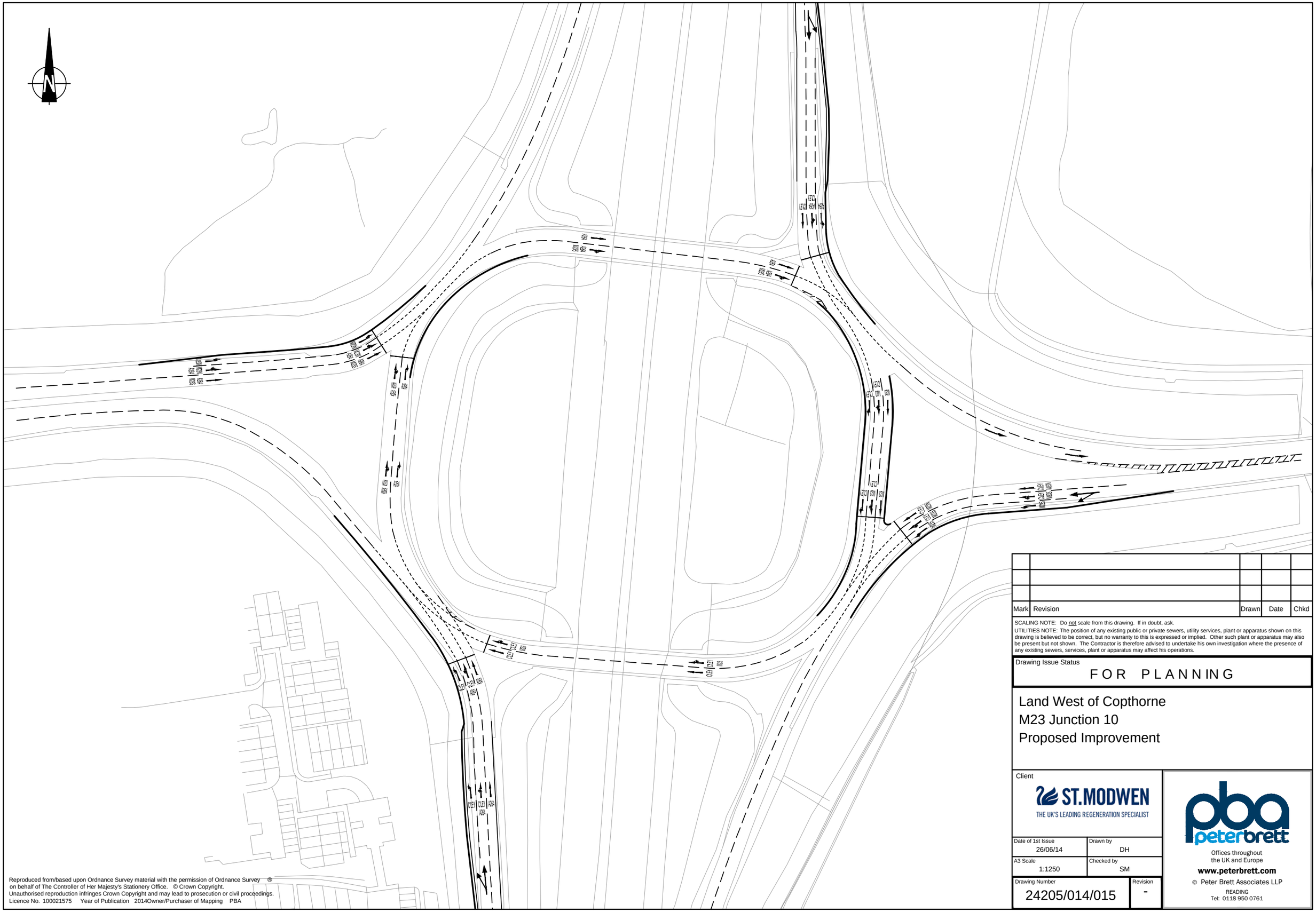
5.4 – In principle and notwithstanding any comments made in connection with this or any other pre application enquiry for this site, it is accepted that the development is accessible by modes other than the private car, that safe and suitable access can be achieved for all users, and that the increase of the development from 350 to 450 dwellings would have limited impacts. It will still be

for the transport assessment to demonstrate in detail how the above matters would be fully addressed.

I trust you appreciate that any advice given by council officers for pre-application enquiries does not constitute a formal response or decision of the council with regard to the granting of planning permission in the future. Any views or opinions expressed are given in good faith, and to the best of ability, without prejudice to the formal consideration of any application, which will be the subject of public consultation and ultimately decided by the Local Planning Authority.

Ian Gledhill
Planning Services

APPENDIX B. M23 JUNCTION 10 IMPROVEMENTS


N
A23
A264
A264
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APPENDIX C. JUNCTION CAPACITY ASSESSMENT OUTPUTS

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.1.0.1820
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+44 (0)1344 379777 software@trl.co.uk trlsoftware.com

The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution

Filename: North Street_East Street_Selsfield Road AM with mitigation - 450 dwellings.j10
Path: T:\Projects\9000 Series Project Numbers\9155ITB Wychwood, Turners Hill Rd, Crawley Down\Tech\Assessments\Picady\Turners Hill Crossroad Assessment
Report generation date: 16/04/2024 14:14:06

«Mitigation - 2029 + Committed Development + Development, AM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Results

Summary of junction performance

	AM		
	Queue (Veh)	Delay (s)	RFC
	Mitigation - 2029 + Committed Development + Development		
Stream B-ACD	2.0	40.57	0.69
Stream A-BCD	2.8	14.49	0.65
Stream D-AB	3.1	77.16	0.80
Stream D-BC	3.1	57.80	0.79
Stream C-ABD	0.2	4.68	0.10

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

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

File summary

File Description

Title	
Location	
Site number	
Date	08/12/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\manchesterhotdesk
Description	

Units

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

Analysis Options

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

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2029 AM		1.0644

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

Mitigation - 2029 + Committed Development + Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	D - Church Road - 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	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development + Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	North Street/East Street/Church Road/Selsfield Road	Crossroads	Two-way	Two-way	Two-way	Two-way		20.04	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	20.04	C

Arms

Arms

Arm	Name	Description	Arm type
A	North Street		Major
B	East Street		Minor
C	Selsfield Road		Major
D	Church Road		Minor

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)
A - North Street	7.00			79.4	✓	0.00
C - Selsfield Road	7.00			81.6	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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 - East Street	One lane	4.56								19	39
D - Church Road	One lane plus flare		9.30	5.10	4.00	3.10	2.80		1.00	31	17

Slope / Intercept / Capacity

Custom Intercept Adjustments

Custom stream intercept adjustment	Stream	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
1	D-A	✓	Reflect QLS	200
2	D-C	✓	Reflect QLS	240

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	620	-	-	-	-	-	-	0.230	0.328	0.230	-	-	-
B-A	582	0.101	0.256	0.256	-	-	-	0.161	0.366	-	0.256	0.256	0.128
B-C	750	0.110	0.278	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	582	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
B-D, offside lane	582	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
C-B	621	0.230	0.230	0.329	-	-	-	-	-	-	-	-	-
D-A	873	-	-	-	-	-	-	0.249	-	0.099	-	-	-
D-B, nearside lane	526	0.146	0.146	0.331	-	-	-	0.232	0.232	0.092	-	-	-
D-B, offside lane	526	0.146	0.146	0.331	-	-	-	0.232	0.232	0.092	-	-	-
D-C	766	-	0.146	0.331	0.116	0.232	0.232	0.232	0.232	0.092	-	-	-

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	Relationship type	Relationship
D7	2029 + Committed Development + Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - North Street		ONE HOUR	✓	548	100.000
B - East Street		ONE HOUR	✓	173	100.000
C - Selsfield Road		ONE HOUR	✓	700	100.000
D - Church Road		ONE HOUR	✓	332	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	24	331	193
	B - East Street	7	0	10	156
	C - Selsfield Road	261	20	0	418
	D - Church Road	32	165	135	0

Vehicle Mix

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

Heavy Vehicle %

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	4	2
	B - East Street	47	0	44	5
	C - Selsfield Road	5	21	0	1
	D - Church Road	10	3	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.69	40.57	2.0	10.6	E	159	238
A-BCD	0.65	14.49	2.8	15.0	B	345	518
A-B						11	16
A-C						147	221
D-AB	0.80	77.16	3.1	15.4	F	126	189
D-BC	0.79	57.80	3.1	16.4	F	179	268
C-ABD	0.10	4.68	0.2	1.3	A	68	101
C-D						354	530
C-A						221	331

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	130	33	365	0.357	128	0.0	0.5	15.081	C
A-BCD	240	60	677	0.355	237	0.0	0.8	8.164	A
A-B	12	3			12				
A-C	161	40			161				
D-AB	98	25	347	0.282	97	0.0	0.4	14.261	B
D-BC	152	38	440	0.346	150	0.0	0.5	12.332	B
C-ABD	41	10	809	0.051	41	0.0	0.1	4.684	A
C-D	299	75			299				
C-A	187	47			187				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	155	39	329	0.473	154	0.5	0.9	20.480	C
A-BCD	323	81	696	0.464	321	0.8	1.3	9.635	A
A-B	12	3			12				
A-C	158	40			158				
D-AB	121	30	293	0.415	120	0.4	0.7	20.735	C
D-BC	177	44	389	0.456	176	0.5	0.8	16.835	C
C-ABD	61	15	873	0.070	61	0.1	0.1	4.456	A
C-D	350	87			350				
C-A	218	55			218				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	190	48	279	0.682	186	0.9	1.9	37.190	E
A-BCD	468	117	723	0.647	462	1.3	2.7	13.838	B
A-B	9	2			9				
A-C	127	32			127				
D-AB	157	39	207	0.759	150	0.7	2.5	57.405	F
D-BC	209	52	281	0.743	202	0.8	2.4	42.658	E
C-ABD	100	25	964	0.104	100	0.1	0.2	4.188	A
C-D	413	103			413				
C-A	258	64			258				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	190	48	277	0.686	190	1.9	2.0	40.573	E
A-BCD	471	118	726	0.649	471	2.7	2.8	14.487	B
A-B	9	2			9				
A-C	123	31			123				
D-AB	158	40	199	0.796	156	2.5	3.1	77.159	F
D-BC	208	52	264	0.788	205	2.4	3.1	57.799	F
C-ABD	100	25	964	0.104	100	0.2	0.2	4.174	A
C-D	412	103			412				
C-A	258	64			258				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	155	39	326	0.476	160	2.0	0.9	22.147	C
A-BCD	326	82	699	0.467	332	2.8	1.4	10.078	B
A-B	11	3			11				
A-C	155	39			155				
D-AB	123	31	283	0.433	132	3.1	0.8	25.104	D
D-BC	176	44	378	0.466	185	3.1	0.9	19.464	C
C-ABD	61	15	873	0.070	62	0.2	0.1	4.406	A
C-D	350	87			350				
C-A	218	55			218				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	130	33	363	0.358	132	0.9	0.6	15.648	C
A-BCD	242	61	679	0.357	244	1.4	0.8	8.379	A
A-B	12	3			12				
A-C	159	40			159				
D-AB	98	25	344	0.286	100	0.8	0.4	14.838	B
D-BC	152	38	437	0.347	153	0.9	0.5	12.753	B
C-ABD	42	10	809	0.052	42	0.1	0.1	4.660	A
C-D	299	75			299				
C-A	186	47			186				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.54	0.54	1.00	1.40	1.45			N/A	N/A
A-BCD	0.78	0.55	1.00	1.40	1.45			N/A	N/A
D-AB	0.38	0.00	0.00	0.38	0.38			N/A	N/A
D-BC	0.52	0.52	1.00	1.40	1.45			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.86	0.13	0.92	1.36	1.36			N/A	N/A
A-BCD	1.26	0.52	1.19	1.72	1.91			N/A	N/A
D-AB	0.68	0.07	0.71	1.40	1.49			N/A	N/A
D-BC	0.81	0.08	0.81	1.05	1.58			N/A	N/A
C-ABD	0.12	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.91	0.03	0.34	4.25	10.03			N/A	N/A
A-BCD	2.72	0.03	0.33	5.42	14.51			N/A	N/A
D-AB	2.48	0.04	0.43	6.83	11.96			N/A	N/A
D-BC	2.44	0.04	0.38	6.37	12.69			N/A	N/A
C-ABD	0.22	0.03	0.28	0.50	1.32			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	2.04	0.03	0.32	3.55	10.55			N/A	N/A
A-BCD	2.84	0.03	0.33	5.35	15.00			N/A	N/A
D-AB	3.11	0.04	0.44	8.69	15.43			N/A	N/A
D-BC	3.10	0.04	0.38	8.03	16.40			N/A	N/A
C-ABD	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.95	0.05	0.45	2.14	3.32			N/A	N/A
A-BCD	1.36	0.19	1.22	2.04	2.69			N/A	N/A
D-AB	0.80	0.04	0.38	1.86	3.06			N/A	N/A
D-BC	0.91	0.04	0.41	2.13	3.49			N/A	N/A
C-ABD	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.57	0.03	0.34	1.24	2.28			N/A	N/A
A-BCD	0.82	0.06	0.67	1.45	1.89			N/A	N/A
D-AB	0.41	0.03	0.30	1.19	1.79			N/A	N/A
D-BC	0.54	0.03	0.32	1.09	2.36			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.1.0.1820
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Filename: North Street_East Street_Selsfield Road PM with mitigation - 450 dwellings.j10
Path: T:\Projects\9000 Series Project Numbers\9155ITB Wychwood, Turners Hill Rd, Crawley Down\Tech\Assessments\Picady\Turners Hill Crossroad Assessment
Report generation date: 16/04/2024 14:15:39

«Mitigation - 2029 + Committed Development + Development, PM
»Junction Network
»Arms
»Traffic Demand
»Origin-Destination Data
»Vehicle Mix
»Results

Summary of junction performance

	PM		
	Queue (Veh)	Delay (s)	RFC
	Mitigation - 2029 + Committed Development + Development		
Stream B-ACD	1.2	23.74	0.54
Stream A-BCD	1.2	7.49	0.42
Stream D-AB	5.1	108.25	0.91
Stream D-BC	5.4	104.28	0.91
Stream C-ABD	0.1	5.20	0.05

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

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

File summary

File Description

Title	
Location	
Site number	
Date	08/12/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\manchesterhotdesk
Description	

Units

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

Analysis Options

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

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G2	2029 PM		1.0794

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

Slope / Intercept / Capacity

Custom Intercept Adjustments

Custom stream intercept adjustment	Stream	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
1	D-A	✓	Reflect QLS	0
2	D-C	✓	Reflect QLS	50

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	620	-	-	-	-	-	-	0.230	0.328	0.230	-	-	-
B-A	582	0.101	0.256	0.256	-	-	-	0.161	0.366	-	0.256	0.256	0.128
B-C	750	0.110	0.278	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	582	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
B-D, offside lane	582	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
C-B	621	0.230	0.230	0.329	-	-	-	-	-	-	-	-	-
D-A	673	-	-	-	-	-	-	0.249	-	0.099	-	-	-
D-B, nearside lane	526	0.146	0.146	0.331	-	-	-	0.232	0.232	0.092	-	-	-
D-B, offside lane	526	0.146	0.146	0.331	-	-	-	0.232	0.232	0.092	-	-	-
D-C	576	-	0.146	0.331	0.116	0.232	0.232	0.232	0.232	0.092	-	-	-

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	Relationship type	Relationship
D9	2029 + Committed Development + Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6+D8

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - North Street		ONE HOUR	✓	565	100.000
B - East Street		ONE HOUR	✓	164	100.000
C - Selsfield Road		ONE HOUR	✓	495	100.000
D - Church Road		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	4	424	136
	B - East Street	13	0	15	136
	C - Selsfield Road	265	13	0	217
	D - Church Road	59	136	154	0

Vehicle Mix

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

Heavy Vehicle %

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	1	0
	B - East Street	8	0	6	1
	C - Selsfield Road	2	17	0	1
	D - Church Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.54	23.74	1.2	5.2	C	150	226
A-BCD	0.42	7.49	1.2	6.0	A	257	385
A-B						3	4
A-C						259	389
D-AB	0.91	108.25	5.1	21.4	F	144	216
D-BC	0.91	104.28	5.4	24.5	F	177	265
C-ABD	0.05	5.20	0.1	0.5	A	30	45
C-D						191	287
C-A						234	351

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	123	31	413	0.299	122	0.0	0.4	12.277	B
A-BCD	179	45	758	0.236	177	0.0	0.5	6.190	A
A-B	3	0.63			3				
A-C	244	61			244				
D-AB	111	28	381	0.290	109	0.0	0.4	13.145	B
D-BC	153	38	385	0.396	150	0.0	0.6	15.148	C
C-ABD	20	5	711	0.028	20	0.0	0.0	5.205	A
C-D	159	40			159				
C-A	194	49			194				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	147	37	379	0.388	147	0.4	0.6	15.404	C
A-BCD	241	60	789	0.305	240	0.5	0.7	6.570	A
A-B	3	0.68			3				
A-C	264	66			264				
D-AB	138	34	321	0.429	137	0.4	0.7	19.350	C
D-BC	176	44	337	0.523	175	0.6	1.0	21.919	C
C-ABD	28	7	751	0.037	28	0.0	0.1	4.999	A
C-D	188	47			188				
C-A	230	57			230				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	333	0.543	179	0.6	1.1	23.036	C
A-BCD	349	87	834	0.418	347	0.7	1.2	7.419	A
A-B	3	0.69			3				
A-C	271	68			271				
D-AB	181	45	219	0.826	170	0.7	3.3	64.713	F
D-BC	204	51	242	0.846	194	1.0	3.7	64.691	F
C-ABD	42	10	808	0.052	42	0.1	0.1	4.723	A
C-D	226	57			226				
C-A	277	69			277				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	332	0.544	180	1.1	1.2	23.737	C
A-BCD	350	87	835	0.419	350	1.2	1.2	7.487	A
A-B	3	0.69			3				
A-C	270	67			270				
D-AB	183	46	202	0.905	176	3.3	5.1	108.254	F
D-BC	202	51	223	0.908	195	3.7	5.4	104.280	F
C-ABD	42	10	807	0.052	42	0.1	0.1	4.706	A
C-D	226	57			226				
C-A	277	69			277				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	147	37	378	0.390	149	1.2	0.7	15.895	C
A-BCD	242	61	790	0.306	244	1.2	0.7	6.644	A
A-B	3	0.67			3				
A-C	263	66			263				
D-AB	141	35	300	0.469	157	5.1	0.9	27.919	D
D-BC	174	43	322	0.540	190	5.4	1.2	30.428	D
C-ABD	28	7	751	0.037	28	0.1	0.1	4.947	A
C-D	188	47			188				
C-A	230	57			230				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	123	31	412	0.299	124	0.7	0.4	12.534	B
A-BCD	180	45	759	0.237	181	0.7	0.5	6.256	A
A-B	2	0.62			2				
A-C	243	61			243				
D-AB	111	28	377	0.295	113	0.9	0.4	13.756	B
D-BC	152	38	383	0.397	154	1.2	0.7	15.910	C
C-ABD	20	5	711	0.028	20	0.1	0.0	5.181	A
C-D	159	40			159				
C-A	194	49			194				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.42	0.00	0.00	0.42	0.42			N/A	N/A
A-BCD	0.48	0.00	0.00	0.48	0.48			N/A	N/A
D-AB	0.40	0.00	0.00	0.40	0.40			N/A	N/A
D-BC	0.64	0.55	1.00	1.40	1.45			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.62	0.15	0.90	1.38	1.44			N/A	N/A
A-BCD	0.71	0.55	1.00	1.40	1.45			N/A	N/A
D-AB	0.73	0.06	0.63	1.03	1.61			N/A	N/A
D-BC	1.05	0.07	0.88	1.87	2.55			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.13	0.03	0.28	1.13	3.62			N/A	N/A
A-BCD	1.22	0.03	0.27	1.22	1.28			N/A	N/A
D-AB	3.31	0.06	0.86	9.16	14.48			N/A	N/A
D-BC	3.70	0.06	1.02	10.29	16.08			N/A	N/A
C-ABD	0.08	0.03	0.26	0.47	0.49			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.16	0.03	0.29	1.16	5.22			N/A	N/A
A-BCD	1.24	0.04	0.36	3.07	5.95			N/A	N/A
D-AB	5.12	0.07	1.14	14.14	21.39			N/A	N/A
D-BC	5.44	0.06	1.25	15.50	24.55			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.66	0.05	0.57	1.29	1.29			N/A	N/A
A-BCD	0.74	0.55	1.00	1.40	1.45			N/A	N/A
D-AB	0.93	0.04	0.38	2.27	3.89			N/A	N/A
D-BC	1.24	0.04	0.38	3.18	5.74			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.44	0.04	0.37	1.26	1.43			N/A	N/A
A-BCD	0.50	0.00	0.00	0.50	0.50			N/A	N/A
D-AB	0.43	0.03	0.29	0.98	1.85			N/A	N/A
D-BC	0.68	0.03	0.30	1.06	3.26			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.0.1820
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Filename: Brookhill Road_Copthorne Roundabout - 2024.j10
Path: T:\Projects\9000 Series Project Numbers\9155ITB Wychwood, Turners Hill Rd, Crawley Down\Tech\Assessments\Arcady\2024
Report generation date: 07/03/2024 15:02:56

»2023 Observed, AM
»2023 Observed, PM
»2029 Future Year, AM
»2029 Future Year, PM
»2029 + Committed Development, AM
»2029 + Committed Development, PM
»2029 + Committed Development + Development (350 Homes), AM
»2029 + Committed Development + Development (350 Homes), PM
»2029 + Committed Development + Development (450 Homes), AM
»2029 + Committed Development + Development (450 Homes), PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
	2023 Observed					
1 - Brookhill Road	0.8	5.09	0.43	0.6	4.44	0.36
2 - Copthorne Common Road	1.9	7.57	0.66	2.7	8.88	0.73
3 - Copthorne Hotel	0.0	5.15	0.01	0.0	4.77	0.01
4 - Copthorne Road	1.0	5.52	0.51	1.4	6.42	0.58
5 - Copthorne Way	1.8	5.73	0.64	1.9	5.98	0.66
	2029 Future Year					
1 - Brookhill Road	0.8	5.09	0.43	0.7	5.05	0.41
2 - Copthorne Common Road	1.9	7.57	0.66	4.0	12.33	0.81
3 - Copthorne Hotel	0.0	5.15	0.01	0.0	5.24	0.01
4 - Copthorne Road	1.0	5.52	0.51	1.8	7.98	0.65
5 - Copthorne Way	1.8	5.73	0.64	2.6	7.46	0.72
	2029 + Committed Development					
1 - Brookhill Road	0.9	5.59	0.46	0.8	5.55	0.46
2 - Copthorne Common Road	2.1	8.20	0.69	5.0	15.28	0.84
3 - Copthorne Hotel	0.0	5.33	0.01	0.0	5.58	0.01
4 - Copthorne Road	1.1	5.76	0.52	2.1	8.95	0.68
5 - Copthorne Way	2.3	6.91	0.70	3.1	8.49	0.76
	2029 + Committed Development + Development (350 Homes)					
1 - Brookhill Road	0.9	5.74	0.47	0.9	5.94	0.48
2 - Copthorne Common Road	2.9	10.09	0.74	6.0	17.78	0.87
3 - Copthorne Hotel	0.0	5.65	0.01	0.0	5.73	0.01
4 - Copthorne Road	1.2	6.19	0.54	2.3	9.74	0.70
5 - Copthorne Way	2.5	7.28	0.72	3.8	10.09	0.80
	2029 + Committed Development + Development (450 Homes)					
1 - Brookhill Road	0.9	5.78	0.47	0.9	6.07	0.48
2 - Copthorne Common Road	3.1	10.83	0.76	6.3	18.52	0.87
3 - Copthorne Hotel	0.0	5.76	0.01	0.0	5.77	0.01
4 - Copthorne Road	1.2	6.33	0.55	2.3	9.97	0.71
5 - Copthorne Way	2.5	7.38	0.72	4.0	10.66	0.81

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

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

File summary

File Description

Title	
Location	
Site number	
Date	14/02/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\basingstoke.hotdesk
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use 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	Relationship type	Relationship
D1	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓		
D2	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓		
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2
D5	Committed Development	AM	ONE HOUR	07:00	08:30	15			
D6	Committed Development	PM	ONE HOUR	16:30	18:00	15			
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6
D9	Development 350 Homes	AM	ONE HOUR	07:00	08:30	15			
D10	Development 350 Homes	PM	ONE HOUR	16:30	18:00	15			
D11	Development 450 Homes	AM	ONE HOUR	07:00	08:30	15			
D12	Development 450 Homes	PM	ONE HOUR	16:30	18:00	15			
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2023-2029 AM		1.0000
G2	2023-2029 PM		1.0794

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2023 Observed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookhill Road/Copthorne Roundabout	Standard Roundabout		1, 2, 3, 4, 5	6.11	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.11	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Brookhill Road		
2	Copthorne Common Road		
3	Copthorne Hotel		
4	Copthorne Road		
5	Copthorne Way		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Brookhill Road	4.95	8.42	26.8	16.1	64.9	47.0		
2 - Copthorne Common Road	5.16	7.53	11.8	21.0	64.9	48.0		
3 - Copthorne Hotel	5.76	6.64	0.5	10.7	64.9	44.0		
4 - Copthorne Road	4.53	7.94	18.8	19.2	64.8	37.0		
5 - Copthorne Way	6.10	8.14	8.0	28.2	64.8	37.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Brookhill Road	0.576	2084
2 - Copthorne Common Road	0.545	1880
3 - Copthorne Hotel	0.495	1623
4 - Copthorne Road	0.569	1973
5 - Copthorne Way	0.605	2167

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	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Brookhill Road		ONE HOUR	✓	485	100.000
2 - Copthorne Common Road		ONE HOUR	✓	847	100.000
3 - Copthorne Hotel		ONE HOUR	✓	8	100.000
4 - Copthorne Road		ONE HOUR	✓	612	100.000
5 - Copthorne Way		ONE HOUR	✓	1019	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	3	43	0	168	271
	2 - Copthorne Common Road	5	1	1	271	569
	3 - Copthorne Hotel	3	1	0	3	1
	4 - Copthorne Road	122	328	3	1	158
	5 - Copthorne Way	165	708	5	141	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	2	0	4	4
	2 - Copthorne Common Road	0	0	0	3	9
	3 - Copthorne Hotel	0	100	0	0	0
	4 - Copthorne Road	2	5	0	0	9
	5 - Copthorne Way	3	5	40	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Brookhill Road	0.43	5.09	0.8	3.1	A	445	668
2 - Copthorne Common Road	0.66	7.57	1.9	2.8	A	777	1166
3 - Copthorne Hotel	0.01	5.15	0.0	0.5	A	7	11
4 - Copthorne Road	0.51	5.52	1.0	2.0	A	562	842
5 - Copthorne Way	0.64	5.73	1.8	2.8	A	935	1403

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	365	91	891	1486	0.246	364	224	0.0	0.3	3.206	A
2 - Copthorne Common Road	638	159	444	1519	0.420	635	811	0.0	0.7	4.058	A
3 - Copthorne Hotel	6	2	1072	942	0.006	6	7	0.0	0.0	3.846	A
4 - Copthorne Road	461	115	640	1500	0.307	459	438	0.0	0.4	3.451	A
5 - Copthorne Way	767	192	350	1848	0.415	764	749	0.0	0.7	3.313	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	436	109	1067	1383	0.315	435	268	0.3	0.5	3.797	A
2 - Copthorne Common Road	761	190	532	1472	0.517	760	970	0.7	1.1	5.046	A
3 - Copthorne Hotel	7	2	1284	843	0.009	7	8	0.0	0.0	4.306	A
4 - Copthorne Road	550	138	766	1427	0.386	549	524	0.4	0.6	4.099	A
5 - Copthorne Way	916	229	419	1807	0.507	915	897	0.7	1.0	4.029	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	534	133	1305	1243	0.429	533	327	0.5	0.7	5.057	A
2 - Copthorne Common Road	933	233	650	1409	0.662	929	1187	1.1	1.9	7.454	A
3 - Copthorne Hotel	9	2	1570	709	0.012	9	10	0.0	0.0	5.137	A
4 - Copthorne Road	674	168	937	1328	0.507	672	641	0.6	1.0	5.477	A
5 - Copthorne Way	1122	280	513	1751	0.641	1119	1097	1.0	1.8	5.673	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	534	133	1308	1242	0.430	534	328	0.7	0.8	5.087	A
2 - Copthorne Common Road	933	233	652	1408	0.662	932	1190	1.9	1.9	7.566	A
3 - Copthorne Hotel	9	2	1574	707	0.012	9	10	0.0	0.0	5.153	A
4 - Copthorne Road	674	168	940	1326	0.508	674	643	1.0	1.0	5.517	A
5 - Copthorne Way	1122	280	514	1750	0.641	1122	1100	1.8	1.8	5.729	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	436	109	1071	1380	0.316	437	269	0.8	0.5	3.821	A
2 - Copthorne Common Road	761	190	534	1471	0.518	765	975	1.9	1.1	5.120	A
3 - Copthorne Hotel	7	2	1290	840	0.009	7	8	0.0	0.0	4.324	A
4 - Copthorne Road	550	138	771	1425	0.386	552	527	1.0	0.6	4.133	A
5 - Copthorne Way	916	229	421	1806	0.507	919	901	1.8	1.0	4.072	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	365	91	896	1483	0.246	366	225	0.5	0.3	3.225	A
2 - Copthorne Common Road	638	159	446	1518	0.420	639	815	1.1	0.7	4.104	A
3 - Copthorne Hotel	6	2	1079	939	0.006	6	7	0.0	0.0	3.860	A
4 - Copthorne Road	461	115	644	1498	0.308	461	440	0.6	0.4	3.475	A
5 - Copthorne Way	767	192	352	1847	0.415	768	754	1.0	0.7	3.343	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.32	0.00	0.00	0.32	0.32			N/A	N/A
2 - Copthorne Common Road	0.72	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
5 - Copthorne Way	0.71	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - Copthorne Common Road	1.06	0.06	0.80	1.99	2.83			N/A	N/A
3 - Copthorne Hotel	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - Copthorne Road	0.62	0.09	0.79	1.36	1.43			N/A	N/A
5 - Copthorne Way	1.02	0.06	0.76	1.94	2.76			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.75	0.03	0.25	0.75	0.75			N/A	N/A
2 - Copthorne Common Road	1.91	0.03	0.27	1.91	2.08			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.02	0.03	0.26	1.02	1.02			N/A	N/A
5 - Copthorne Way	1.75	0.03	0.26	1.75	1.75			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.75	0.03	0.28	1.03	3.06			N/A	N/A
2 - Copthorne Common Road	1.94	0.03	0.27	1.94	1.94			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.03	0.03	0.27	1.03	1.99			N/A	N/A
5 - Copthorne Way	1.77	0.03	0.26	1.77	1.77			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - Copthorne Common Road	1.09	0.10	0.99	1.78	2.22			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.63	0.20	0.93	1.39	1.44			N/A	N/A
5 - Copthorne Way	1.04	0.16	1.02	1.51	1.81			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2 - Copthorne Common Road	0.73	0.05	0.53	1.27	1.80			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.45	0.04	0.35	1.16	1.33			N/A	N/A
5 - Copthorne Way	0.71	0.06	0.68	1.41	1.41			N/A	N/A

2023 Observed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookhill Road/Copthorne Roundabout	Standard Roundabout		1, 2, 3, 4, 5	6.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.79	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	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Brookhill Road		ONE HOUR	✓	422	100.000
2 - Copthorne Common Road		ONE HOUR	✓	1016	100.000
3 - Copthorne Hotel		ONE HOUR	✓	7	100.000
4 - Copthorne Road		ONE HOUR	✓	703	100.000
5 - Copthorne Way		ONE HOUR	✓	1065	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	42	0	151	229
	2 - Copthorne Common Road	27	0	1	269	719
	3 - Copthorne Hotel	2	0	0	5	0
	4 - Copthorne Road	154	329	3	1	216
	5 - Copthorne Way	183	728	2	152	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	12	0	1	0
	2 - Copthorne Common Road	0	0	0	4	1
	3 - Copthorne Hotel	0	0	0	0	0
	4 - Copthorne Road	1	1	0	0	3
	5 - Copthorne Way	1	2	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Brookhill Road	0.36	4.44	0.6	2.7	A	387	581
2 - Copthorne Common Road	0.73	8.88	2.7	7.5	A	932	1398
3 - Copthorne Hotel	0.01	4.77	0.0	0.5	A	6	10
4 - Copthorne Road	0.58	6.42	1.4	1.5	A	645	968
5 - Copthorne Way	0.66	5.98	1.9	3.1	A	977	1466

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	318	79	911	1523	0.209	317	274	0.0	0.3	2.981	A
2 - Copthorne Common Road	765	191	404	1627	0.470	761	824	0.0	0.9	4.145	A
3 - Copthorne Hotel	5	1	1161	1037	0.005	5	4	0.0	0.0	3.487	A
4 - Copthorne Road	529	132	732	1528	0.346	527	433	0.0	0.5	3.589	A
5 - Copthorne Way	802	200	387	1882	0.426	799	873	0.0	0.7	3.315	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	379	95	1091	1419	0.267	379	329	0.3	0.4	3.461	A
2 - Copthorne Common Road	913	228	483	1583	0.577	911	987	0.9	1.3	5.346	A
3 - Copthorne Hotel	6	2	1389	922	0.007	6	5	0.0	0.0	3.931	A
4 - Copthorne Road	632	158	877	1447	0.437	631	519	0.5	0.8	4.408	A
5 - Copthorne Way	957	239	463	1837	0.521	956	1045	0.7	1.1	4.074	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	465	116	1334	1278	0.364	464	402	0.4	0.6	4.418	A
2 - Copthorne Common Road	1119	280	591	1524	0.734	1113	1207	1.3	2.7	8.657	A
3 - Copthorne Hotel	8	2	1698	766	0.010	8	7	0.0	0.0	4.745	A
4 - Copthorne Road	774	194	1071	1337	0.579	772	634	0.8	1.4	6.344	A
5 - Copthorne Way	1173	293	566	1775	0.660	1169	1277	1.1	1.9	5.905	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	465	116	1338	1276	0.364	465	403	0.6	0.6	4.438	A
2 - Copthorne Common Road	1119	280	592	1523	0.734	1118	1210	2.7	2.7	8.883	A
3 - Copthorne Hotel	8	2	1704	763	0.010	8	7	0.0	0.0	4.765	A
4 - Copthorne Road	774	194	1076	1334	0.580	774	636	1.4	1.4	6.423	A
5 - Copthorne Way	1173	293	568	1774	0.661	1173	1281	1.9	1.9	5.978	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	379	95	1096	1416	0.268	380	330	0.6	0.4	3.480	A
2 - Copthorne Common Road	913	228	485	1582	0.577	919	991	2.7	1.4	5.471	A
3 - Copthorne Hotel	6	2	1398	917	0.007	6	5	0.0	0.0	3.952	A
4 - Copthorne Road	632	158	883	1443	0.438	634	522	1.4	0.8	4.462	A
5 - Copthorne Way	957	239	466	1835	0.522	961	1051	1.9	1.1	4.132	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	318	79	916	1520	0.209	318	276	0.4	0.3	2.997	A
2 - Copthorne Common Road	765	191	406	1625	0.471	767	829	1.4	0.9	4.202	A
3 - Copthorne Hotel	5	1	1168	1034	0.005	5	5	0.0	0.0	3.502	A
4 - Copthorne Road	529	132	737	1525	0.347	530	436	0.8	0.5	3.620	A
5 - Copthorne Way	802	200	389	1881	0.426	803	878	1.1	0.7	3.343	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.26	0.00	0.00	0.26	0.26			N/A	N/A
2 - Copthorne Common Road	0.88	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.53	0.53	1.00	1.40	1.45			N/A	N/A
5 - Copthorne Way	0.74	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - Copthorne Common Road	1.35	0.05	0.62	3.20	4.77			N/A	N/A
3 - Copthorne Hotel	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - Copthorne Road	0.77	0.08	0.80	1.36	1.36			N/A	N/A
5 - Copthorne Way	1.08	0.06	0.71	2.24	3.15			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.57	0.03	0.25	0.57	0.57			N/A	N/A
2 - Copthorne Common Road	2.67	0.03	0.28	2.67	7.54			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.35	0.03	0.26	1.35	1.35			N/A	N/A
5 - Copthorne Way	1.91	0.03	0.27	1.91	1.91			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.57	0.03	0.30	1.45	2.67			N/A	N/A
2 - Copthorne Common Road	2.71	0.03	0.27	2.71	2.71			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.37	0.03	0.27	1.37	1.48			N/A	N/A
5 - Copthorne Way	1.93	0.03	0.26	1.93	1.93			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.37	0.00	0.00	0.37	0.37			N/A	N/A
2 - Copthorne Common Road	1.38	0.07	0.97	2.90	3.99			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.79	0.16	0.92	1.40	1.46			N/A	N/A
5 - Copthorne Way	1.10	0.14	1.04	1.70	1.96			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.27	0.00	0.00	0.27	0.27			N/A	N/A
2 - Copthorne Common Road	0.90	0.04	0.43	1.99	3.15			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.53	0.05	0.49	1.30	1.41			N/A	N/A
5 - Copthorne Way	0.75	0.06	0.65	1.14	1.67			N/A	N/A

2029 Future Year, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookhill Road/Copthorne Roundabout	Standard Roundabout		1, 2, 3, 4, 5	6.11	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.11	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	Relationship type	Relationship
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Brookhill Road		ONE HOUR	✓	485	100.000
2 - Copthorne Common Road		ONE HOUR	✓	847	100.000
3 - Copthorne Hotel		ONE HOUR	✓	8	100.000
4 - Copthorne Road		ONE HOUR	✓	612	100.000
5 - Copthorne Way		ONE HOUR	✓	1019	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	3	43	0	168	271
	2 - Copthorne Common Road	5	1	1	271	569
	3 - Copthorne Hotel	3	1	0	3	1
	4 - Copthorne Road	122	328	3	1	158
	5 - Copthorne Way	165	708	5	141	0

Vehicle Mix

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

Mitigation - 2029 + Committed Development + Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Minor arm visibility to right	D - Church Road - 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	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
Warning	Demand Set Relationship	D9 - 2029 + Committed Development + Development, PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	North Street/East Street/Church Road/Selsfield Road	Crossroads	Two-way	Two-way	Two-way	Two-way		27.25	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	27.25	D

Arms

Arms

Arm	Name	Description	Arm type
A	North Street		Major
B	East Street		Minor
C	Selsfield Road		Major
D	Church Road		Minor

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)
A - North Street	7.00			79.4	✓	0.00
C - Selsfield Road	7.00			81.6	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	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 - East Street	One lane	4.56								19	39
D - Church Road	One lane plus flare		9.30	5.10	4.00	3.10	2.80	✓	1.00	31	17

Heavy Vehicle %

	To					
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	2	0	4	4
	2 - Copthorne Common Road	0	0	0	3	9
	3 - Copthorne Hotel	0	100	0	0	0
	4 - Copthorne Road	2	5	0	0	9
	5 - Copthorne Way	3	5	40	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Brookhill Road	0.43	5.09	0.8	3.1	A	445	668
2 - Copthorne Common Road	0.66	7.57	1.9	2.8	A	777	1166
3 - Copthorne Hotel	0.01	5.15	0.0	0.5	A	7	11
4 - Copthorne Road	0.51	5.52	1.0	2.0	A	562	842
5 - Copthorne Way	0.64	5.73	1.8	2.8	A	935	1403

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	365	91	891	1486	0.246	364	224	0.0	0.3	3.206	A
2 - Copthorne Common Road	638	159	444	1519	0.420	635	811	0.0	0.7	4.058	A
3 - Copthorne Hotel	6	2	1072	942	0.006	6	7	0.0	0.0	3.846	A
4 - Copthorne Road	461	115	640	1500	0.307	459	438	0.0	0.4	3.451	A
5 - Copthorne Way	767	192	350	1848	0.415	764	749	0.0	0.7	3.313	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	436	109	1067	1383	0.315	435	268	0.3	0.5	3.797	A
2 - Copthorne Common Road	761	190	532	1472	0.517	760	970	0.7	1.1	5.046	A
3 - Copthorne Hotel	7	2	1284	843	0.009	7	8	0.0	0.0	4.306	A
4 - Copthorne Road	550	138	766	1427	0.386	549	524	0.4	0.6	4.099	A
5 - Copthorne Way	916	229	419	1807	0.507	915	897	0.7	1.0	4.029	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	534	133	1305	1243	0.429	533	327	0.5	0.7	5.057	A
2 - Copthorne Common Road	933	233	650	1409	0.662	929	1187	1.1	1.9	7.454	A
3 - Copthorne Hotel	9	2	1570	709	0.012	9	10	0.0	0.0	5.137	A
4 - Copthorne Road	674	168	937	1328	0.507	672	641	0.6	1.0	5.477	A
5 - Copthorne Way	1122	280	513	1751	0.641	1119	1097	1.0	1.8	5.673	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	534	133	1308	1242	0.430	534	328	0.7	0.8	5.087	A
2 - Copthorne Common Road	933	233	652	1408	0.662	932	1190	1.9	1.9	7.566	A
3 - Copthorne Hotel	9	2	1574	707	0.012	9	10	0.0	0.0	5.153	A
4 - Copthorne Road	674	168	940	1326	0.508	674	643	1.0	1.0	5.517	A
5 - Copthorne Way	1122	280	514	1750	0.641	1122	1100	1.8	1.8	5.729	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	436	109	1071	1380	0.316	437	269	0.8	0.5	3.821	A
2 - Copthorne Common Road	761	190	534	1471	0.518	765	975	1.9	1.1	5.120	A
3 - Copthorne Hotel	7	2	1290	840	0.009	7	8	0.0	0.0	4.324	A
4 - Copthorne Road	550	138	771	1425	0.386	552	527	1.0	0.6	4.133	A
5 - Copthorne Way	916	229	421	1806	0.507	919	901	1.8	1.0	4.072	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	365	91	896	1483	0.246	366	225	0.5	0.3	3.225	A
2 - Copthorne Common Road	638	159	446	1518	0.420	639	815	1.1	0.7	4.104	A
3 - Copthorne Hotel	6	2	1079	939	0.006	6	7	0.0	0.0	3.860	A
4 - Copthorne Road	461	115	644	1498	0.308	461	440	0.6	0.4	3.475	A
5 - Copthorne Way	767	192	352	1847	0.415	768	754	1.0	0.7	3.343	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.32	0.00	0.00	0.32	0.32			N/A	N/A
2 - Copthorne Common Road	0.72	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.44	0.00	0.00	0.44	0.44			N/A	N/A
5 - Copthorne Way	0.71	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - Copthorne Common Road	1.06	0.06	0.80	1.99	2.83			N/A	N/A
3 - Copthorne Hotel	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - Copthorne Road	0.62	0.09	0.79	1.36	1.43			N/A	N/A
5 - Copthorne Way	1.02	0.06	0.76	1.94	2.76			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.75	0.03	0.25	0.75	0.75			N/A	N/A
2 - Copthorne Common Road	1.91	0.03	0.27	1.91	2.08			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.02	0.03	0.26	1.02	1.02			N/A	N/A
5 - Copthorne Way	1.75	0.03	0.26	1.75	1.75			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.75	0.03	0.28	1.03	3.06			N/A	N/A
2 - Copthorne Common Road	1.94	0.03	0.27	1.94	1.94			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.03	0.03	0.27	1.03	1.99			N/A	N/A
5 - Copthorne Way	1.77	0.03	0.26	1.77	1.77			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.46	0.00	0.00	0.46	0.46			N/A	N/A
2 - Copthorne Common Road	1.09	0.10	0.99	1.78	2.22			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.63	0.20	0.93	1.39	1.44			N/A	N/A
5 - Copthorne Way	1.04	0.16	1.02	1.51	1.81			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2 - Copthorne Common Road	0.73	0.05	0.53	1.27	1.80			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.45	0.04	0.35	1.16	1.33			N/A	N/A
5 - Copthorne Way	0.71	0.06	0.68	1.41	1.41			N/A	N/A

2029 Future Year, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookhill Road/Copthorne Roundabout	Standard Roundabout		1, 2, 3, 4, 5	8.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.79	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	Relationship type	Relationship
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Brookhill Road		ONE HOUR	✓	456	100.000
2 - Copthorne Common Road		ONE HOUR	✓	1097	100.000
3 - Copthorne Hotel		ONE HOUR	✓	8	100.000
4 - Copthorne Road		ONE HOUR	✓	759	100.000
5 - Copthorne Way		ONE HOUR	✓	1150	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	45	0	163	247
	2 - Copthorne Common Road	29	0	1	290	776
	3 - Copthorne Hotel	2	0	0	5	0
	4 - Copthorne Road	166	355	3	1	233
	5 - Copthorne Way	198	786	2	164	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	12	0	1	0
	2 - Copthorne Common Road	0	0	0	4	1
	3 - Copthorne Hotel	0	0	0	0	0
	4 - Copthorne Road	1	1	0	0	3
	5 - Copthorne Way	1	2	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Brookhill Road	0.41	5.05	0.7	3.1	A	418	627
2 - Copthorne Common Road	0.81	12.33	4.0	18.5	B	1006	1509
3 - Copthorne Hotel	0.01	5.24	0.0	0.5	A	7	10
4 - Copthorne Road	0.65	7.98	1.8	2.2	A	696	1044
5 - Copthorne Way	0.72	7.46	2.6	5.0	A	1055	1582

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	343	86	983	1481	0.232	342	296	0.0	0.3	3.156	A
2 - Copthorne Common Road	826	206	436	1609	0.513	821	889	0.0	1.0	4.548	A
3 - Copthorne Hotel	6	1	1252	991	0.006	6	5	0.0	0.0	3.652	A
4 - Copthorne Road	571	143	790	1495	0.382	569	468	0.0	0.6	3.875	A
5 - Copthorne Way	865	216	417	1864	0.464	862	942	0.0	0.9	3.581	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	409	102	1177	1369	0.299	409	354	0.3	0.4	3.748	A
2 - Copthorne Common Road	986	246	521	1562	0.631	983	1065	1.0	1.7	6.193	A
3 - Copthorne Hotel	7	2	1499	867	0.008	7	6	0.0	0.0	4.186	A
4 - Copthorne Road	682	171	946	1408	0.485	681	560	0.6	0.9	4.946	A
5 - Copthorne Way	1033	258	500	1815	0.569	1032	1127	0.9	1.3	4.585	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	502	125	1438	1217	0.412	500	433	0.4	0.7	5.015	A
2 - Copthorne Common Road	1207	302	638	1498	0.806	1199	1301	1.7	3.9	11.676	B
3 - Copthorne Hotel	8	2	1829	700	0.012	8	7	0.0	0.0	5.204	A
4 - Copthorne Road	835	209	1154	1290	0.648	832	683	0.9	1.8	7.800	A
5 - Copthorne Way	1266	316	611	1749	0.724	1261	1375	1.3	2.5	7.298	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	502	125	1444	1214	0.413	502	435	0.7	0.7	5.052	A
2 - Copthorne Common Road	1207	302	639	1497	0.806	1207	1306	3.9	4.0	12.334	B
3 - Copthorne Hotel	8	2	1839	695	0.012	8	7	0.0	0.0	5.242	A
4 - Copthorne Road	835	209	1161	1286	0.650	835	687	1.8	1.8	7.976	A
5 - Copthorne Way	1266	316	613	1748	0.724	1266	1383	2.5	2.6	7.461	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	409	102	1185	1364	0.300	411	357	0.7	0.4	3.777	A
2 - Copthorne Common Road	986	246	524	1561	0.632	995	1072	4.0	1.7	6.464	A
3 - Copthorne Hotel	7	2	1513	860	0.008	7	6	0.0	0.0	4.221	A
4 - Copthorne Road	682	171	955	1402	0.486	686	564	1.8	1.0	5.047	A
5 - Copthorne Way	1033	258	503	1813	0.570	1038	1138	2.6	1.3	4.678	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	343	86	990	1478	0.232	343	298	0.4	0.3	3.176	A
2 - Copthorne Common Road	826	206	438	1608	0.514	828	895	1.7	1.1	4.634	A
3 - Copthorne Hotel	6	1	1261	986	0.006	6	5	0.0	0.0	3.669	A
4 - Copthorne Road	571	143	796	1492	0.383	573	471	1.0	0.6	3.922	A
5 - Copthorne Way	865	216	420	1862	0.465	867	949	1.3	0.9	3.623	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
2 - Copthorne Common Road	1.04	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.61	0.55	1.00	1.40	1.45			N/A	N/A
5 - Copthorne Way	0.86	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.42	0.00	0.00	0.42	0.42			N/A	N/A
2 - Copthorne Common Road	1.68	0.05	0.49	4.39	6.89			N/A	N/A
3 - Copthorne Hotel	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - Copthorne Road	0.93	0.07	0.78	1.69	2.19			N/A	N/A
5 - Copthorne Way	1.31	0.05	0.53	3.13	4.75			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.69	0.03	0.25	0.69	0.69			N/A	N/A
2 - Copthorne Common Road	3.90	0.03	0.31	4.69	18.54			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.79	0.03	0.27	1.79	1.82			N/A	N/A
5 - Copthorne Way	2.55	0.03	0.28	2.55	4.96			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.70	0.03	0.29	1.24	3.11			N/A	N/A
2 - Copthorne Common Road	4.02	0.03	0.28	4.02	9.81			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.83	0.03	0.27	1.83	1.86			N/A	N/A
5 - Copthorne Way	2.59	0.03	0.27	2.59	2.59			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.43	0.00	0.00	0.43	0.43			N/A	N/A
2 - Copthorne Common Road	1.75	0.05	0.64	4.48	6.82			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.96	0.10	0.93	1.48	1.83			N/A	N/A
5 - Copthorne Way	1.34	0.08	1.04	2.64	3.54			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.30	0.00	0.00	0.30	0.30			N/A	N/A
2 - Copthorne Common Road	1.07	0.04	0.36	2.67	4.92			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.62	0.05	0.47	1.44	1.44			N/A	N/A
5 - Copthorne Way	0.87	0.05	0.47	1.86	2.79			N/A	N/A

2029 + Committed Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookhill Road/Copthorne Roundabout	Standard Roundabout		1, 2, 3, 4, 5	6.83	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.83	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	Relationship type	Relationship
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Brookhill Road		ONE HOUR	✓	505	100.000
2 - Copthorne Common Road		ONE HOUR	✓	867	100.000
3 - Copthorne Hotel		ONE HOUR	✓	8	100.000
4 - Copthorne Road		ONE HOUR	✓	614	100.000
5 - Copthorne Way		ONE HOUR	✓	1118	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	3	43	0	168	291
	2 - Copthorne Common Road	5	1	1	271	589
	3 - Copthorne Hotel	3	1	0	3	1
	4 - Copthorne Road	122	328	3	1	160
	5 - Copthorne Way	199	769	5	145	0

Vehicle Mix

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

Heavy Vehicle %

	To					
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	2	0	4	4
	2 - Copthorne Common Road	0	0	0	3	9
	3 - Copthorne Hotel	0	100	0	0	0
	4 - Copthorne Road	2	5	0	0	9
	5 - Copthorne Way	3	5	40	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Brookhill Road	0.46	5.59	0.9	3.0	A	463	695
2 - Copthorne Common Road	0.69	8.20	2.1	3.7	A	796	1193
3 - Copthorne Hotel	0.01	5.33	0.0	0.5	A	7	11
4 - Copthorne Road	0.52	5.76	1.1	1.9	A	563	845
5 - Copthorne Way	0.70	6.91	2.3	4.2	A	1026	1539

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	380	95	940	1457	0.261	379	249	0.0	0.4	3.333	A
2 - Copthorne Common Road	653	163	462	1509	0.433	650	856	0.0	0.8	4.176	A
3 - Copthorne Hotel	6	2	1105	926	0.007	6	7	0.0	0.0	3.911	A
4 - Copthorne Road	462	116	670	1483	0.312	460	441	0.0	0.5	3.515	A
5 - Copthorne Way	842	210	350	1850	0.455	838	780	0.0	0.8	3.548	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	454	113	1125	1349	0.337	453	298	0.4	0.5	4.017	A
2 - Copthorne Common Road	779	195	553	1460	0.534	778	1025	0.8	1.1	5.264	A
3 - Copthorne Hotel	7	2	1323	825	0.009	7	8	0.0	0.0	4.403	A
4 - Copthorne Road	552	138	802	1406	0.393	551	528	0.5	0.6	4.207	A
5 - Copthorne Way	1005	251	419	1808	0.556	1003	934	0.8	1.2	4.464	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	556	139	1375	1202	0.462	555	364	0.5	0.9	5.548	A
2 - Copthorne Common Road	955	239	676	1394	0.685	951	1253	1.1	2.1	8.046	A
3 - Copthorne Hotel	9	2	1617	687	0.013	9	10	0.0	0.0	5.306	A
4 - Copthorne Road	676	169	981	1303	0.519	674	645	0.6	1.1	5.714	A
5 - Copthorne Way	1231	308	513	1752	0.703	1227	1142	1.2	2.3	6.797	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	556	139	1379	1200	0.463	556	366	0.9	0.9	5.592	A
2 - Copthorne Common Road	955	239	678	1393	0.685	954	1257	2.1	2.1	8.200	A
3 - Copthorne Hotel	9	2	1623	685	0.013	9	10	0.0	0.0	5.326	A
4 - Copthorne Road	676	169	984	1301	0.520	676	647	1.1	1.1	5.761	A
5 - Copthorne Way	1231	308	514	1751	0.703	1231	1146	2.3	2.3	6.913	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	454	113	1131	1345	0.337	455	300	0.9	0.5	4.052	A
2 - Copthorne Common Road	779	195	556	1459	0.534	783	1031	2.1	1.2	5.359	A
3 - Copthorne Hotel	7	2	1331	821	0.009	7	8	0.0	0.0	4.424	A
4 - Copthorne Road	552	138	807	1403	0.393	554	531	1.1	0.7	4.246	A
5 - Copthorne Way	1005	251	421	1807	0.556	1009	940	2.3	1.3	4.538	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	380	95	945	1454	0.261	381	250	0.5	0.4	3.355	A
2 - Copthorne Common Road	653	163	465	1508	0.433	654	861	1.2	0.8	4.228	A
3 - Copthorne Hotel	6	2	1112	923	0.007	6	7	0.0	0.0	3.926	A
4 - Copthorne Road	462	116	674	1480	0.312	463	444	0.7	0.5	3.543	A
5 - Copthorne Way	842	210	352	1848	0.455	843	785	1.3	0.8	3.590	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - Copthorne Common Road	0.76	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.45	0.00	0.00	0.45	0.45			N/A	N/A
5 - Copthorne Way	0.83	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.50	0.05	0.49	1.30	1.40			N/A	N/A
2 - Copthorne Common Road	1.13	0.06	0.77	2.36	3.30			N/A	N/A
3 - Copthorne Hotel	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - Copthorne Road	0.64	0.09	0.79	1.36	1.43			N/A	N/A
5 - Copthorne Way	1.24	0.05	0.62	2.86	4.22			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.85	0.03	0.26	0.85	0.85			N/A	N/A
2 - Copthorne Common Road	2.11	0.03	0.27	2.11	3.65			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.06	0.03	0.26	1.06	1.06			N/A	N/A
5 - Copthorne Way	2.31	0.03	0.27	2.31	3.10			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.86	0.03	0.28	0.86	3.02			N/A	N/A
2 - Copthorne Common Road	2.14	0.03	0.27	2.14	2.14			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.07	0.03	0.27	1.07	1.95			N/A	N/A
5 - Copthorne Way	2.34	0.03	0.27	2.34	2.34			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.51	0.51	1.00	1.40	1.45			N/A	N/A
2 - Copthorne Common Road	1.16	0.09	0.99	1.99	2.74			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.65	0.19	0.92	1.39	1.44			N/A	N/A
5 - Copthorne Way	1.27	0.10	1.06	2.28	2.94			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - Copthorne Common Road	0.77	0.05	0.48	1.54	2.09			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.46	0.04	0.38	1.20	1.35			N/A	N/A
5 - Copthorne Way	0.84	0.05	0.51	1.70	2.41			N/A	N/A

2029 + Committed Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookhill Road/Copthorne Roundabout	Standard Roundabout		1, 2, 3, 4, 5	10.29	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.29	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	Relationship type	Relationship
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Brookhill Road		ONE HOUR	✓	502	100.000
2 - Copthorne Common Road		ONE HOUR	✓	1122	100.000
3 - Copthorne Hotel		ONE HOUR	✓	8	100.000
4 - Copthorne Road		ONE HOUR	✓	764	100.000
5 - Copthorne Way		ONE HOUR	✓	1204	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	45	0	163	293
	2 - Copthorne Common Road	29	0	1	290	801
	3 - Copthorne Hotel	2	0	0	5	0
	4 - Copthorne Road	166	355	3	1	238
	5 - Copthorne Way	229	804	2	169	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	12	0	1	0
	2 - Copthorne Common Road	0	0	0	4	1
	3 - Copthorne Hotel	0	0	0	0	0
	4 - Copthorne Road	1	1	0	0	3
	5 - Copthorne Way	1	2	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Brookhill Road	0.46	5.55	0.8	3.1	A	460	690
2 - Copthorne Common Road	0.84	15.28	5.0	25.8	C	1029	1544
3 - Copthorne Hotel	0.01	5.58	0.0	0.5	A	7	10
4 - Copthorne Road	0.68	8.95	2.1	3.7	A	701	1051
5 - Copthorne Way	0.76	8.49	3.1	9.0	A	1104	1657

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	378	94	1000	1473	0.256	376	319	0.0	0.3	3.276	A
2 - Copthorne Common Road	844	211	474	1589	0.532	840	903	0.0	1.1	4.780	A
3 - Copthorne Hotel	6	1	1309	963	0.006	6	5	0.0	0.0	3.760	A
4 - Copthorne Road	575	144	843	1465	0.392	572	471	0.0	0.6	4.020	A
5 - Copthorne Way	906	227	417	1865	0.486	902	998	0.0	0.9	3.728	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	451	113	1197	1359	0.332	450	382	0.3	0.5	3.959	A
2 - Copthorne Common Road	1008	252	567	1538	0.656	1005	1081	1.1	1.9	6.726	A
3 - Copthorne Hotel	7	2	1567	833	0.008	7	6	0.0	0.0	4.357	A
4 - Copthorne Road	687	172	1009	1372	0.501	685	564	0.6	1.0	5.233	A
5 - Copthorne Way	1082	270	500	1816	0.596	1080	1195	0.9	1.5	4.879	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	552	138	1462	1205	0.458	551	467	0.5	0.8	5.493	A
2 - Copthorne Common Road	1235	309	693	1469	0.841	1223	1320	1.9	4.8	14.038	B
3 - Copthorne Hotel	8	2	1909	660	0.013	8	7	0.0	0.0	5.523	A
4 - Copthorne Road	841	210	1230	1247	0.674	837	688	1.0	2.0	8.683	A
5 - Copthorne Way	1325	331	610	1750	0.757	1319	1457	1.5	3.0	8.236	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	552	138	1469	1201	0.460	552	469	0.8	0.8	5.548	A
2 - Copthorne Common Road	1235	309	695	1467	0.842	1234	1326	4.8	5.0	15.275	C
3 - Copthorne Hotel	8	2	1922	653	0.013	8	7	0.0	0.0	5.579	A
4 - Copthorne Road	841	210	1239	1242	0.677	841	692	2.0	2.1	8.952	A
5 - Copthorne Way	1325	331	613	1748	0.758	1325	1466	3.0	3.1	8.493	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	451	113	1207	1353	0.333	452	385	0.8	0.5	4.000	A
2 - Copthorne Common Road	1008	252	570	1536	0.656	1021	1089	5.0	2.0	7.146	A
3 - Copthorne Hotel	7	2	1585	824	0.008	7	6	0.0	0.0	4.407	A
4 - Copthorne Road	687	172	1022	1365	0.503	691	570	2.1	1.0	5.373	A
5 - Copthorne Way	1082	270	504	1813	0.597	1088	1209	3.1	1.5	5.009	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	378	94	1007	1469	0.257	378	322	0.5	0.3	3.302	A
2 - Copthorne Common Road	844	211	476	1587	0.532	848	909	2.0	1.1	4.890	A
3 - Copthorne Hotel	6	1	1319	958	0.006	6	5	0.0	0.0	3.781	A
4 - Copthorne Road	575	144	850	1462	0.393	577	475	1.0	0.7	4.075	A
5 - Copthorne Way	906	227	420	1863	0.486	908	1006	1.5	1.0	3.781	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2 - Copthorne Common Road	1.12	0.55	1.02	1.43	1.49			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.64	0.55	1.00	1.40	1.45			N/A	N/A
5 - Copthorne Way	0.94	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - Copthorne Common Road	1.87	0.05	0.48	4.95	7.98			N/A	N/A
3 - Copthorne Hotel	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - Copthorne Road	0.99	0.06	0.75	1.88	2.65			N/A	N/A
5 - Copthorne Way	1.46	0.05	0.48	3.69	5.74			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.84	0.03	0.26	0.84	0.84			N/A	N/A
2 - Copthorne Common Road	4.82	0.03	0.34	9.30	25.83			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	2.01	0.03	0.27	2.01	3.68			N/A	N/A
5 - Copthorne Way	3.01	0.03	0.28	3.01	9.03			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.85	0.03	0.28	0.85	3.10			N/A	N/A
2 - Copthorne Common Road	5.05	0.03	0.29	5.05	18.71			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	2.06	0.03	0.27	2.06	2.61			N/A	N/A
5 - Copthorne Way	3.07	0.03	0.27	3.07	3.07			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.50	0.50	1.00	1.40	1.45			N/A	N/A
2 - Copthorne Common Road	1.95	0.05	0.48	5.23	8.44			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.02	0.08	0.92	1.74	2.18			N/A	N/A
5 - Copthorne Way	1.50	0.07	0.97	3.30	4.64			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - Copthorne Common Road	1.15	0.03	0.34	2.73	5.73			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.65	0.04	0.44	1.16	1.77			N/A	N/A
5 - Copthorne Way	0.95	0.04	0.42	2.26	3.61			N/A	N/A

2029 + Committed Development + Development (350 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookhill Road/Copthorne Roundabout	Standard Roundabout		1, 2, 3, 4, 5	7.66	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.66	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	Relationship type	Relationship
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Brookhill Road		ONE HOUR	✓	505	100.000
2 - Copthorne Common Road		ONE HOUR	✓	942	100.000
3 - Copthorne Hotel		ONE HOUR	✓	8	100.000
4 - Copthorne Road		ONE HOUR	✓	620	100.000
5 - Copthorne Way		ONE HOUR	✓	1138	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	3	43	0	168	291
	2 - Copthorne Common Road	5	1	1	289	646
	3 - Copthorne Hotel	3	1	0	3	1
	4 - Copthorne Road	122	334	3	1	160
	5 - Copthorne Way	199	789	5	145	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	2	0	4	4
	2 - Copthorne Common Road	0	0	0	3	9
	3 - Copthorne Hotel	0	100	0	0	0
	4 - Copthorne Road	2	5	0	0	9
	5 - Copthorne Way	3	5	40	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Brookhill Road	0.47	5.74	0.9	3.0	A	463	695
2 - Copthorne Common Road	0.74	10.09	2.9	9.7	B	864	1296
3 - Copthorne Hotel	0.01	5.65	0.0	0.5	A	7	11
4 - Copthorne Road	0.54	6.19	1.2	1.9	A	569	853
5 - Copthorne Way	0.72	7.28	2.5	4.6	A	1044	1566

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	380	95	959	1446	0.263	379	249	0.0	0.4	3.369	A
2 - Copthorne Common Road	709	177	462	1508	0.470	705	876	0.0	0.9	4.464	A
3 - Copthorne Hotel	6	2	1161	900	0.007	6	7	0.0	0.0	4.026	A
4 - Copthorne Road	467	117	713	1458	0.320	465	454	0.0	0.5	3.620	A
5 - Copthorne Way	857	214	355	1847	0.464	853	823	0.0	0.9	3.612	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	454	113	1148	1335	0.340	453	298	0.4	0.5	4.079	A
2 - Copthorne Common Road	847	212	553	1460	0.580	845	1048	0.9	1.4	5.834	A
3 - Copthorne Hotel	7	2	1390	793	0.009	7	8	0.0	0.0	4.580	A
4 - Copthorne Road	557	139	853	1376	0.405	557	544	0.5	0.7	4.387	A
5 - Copthorne Way	1023	256	425	1805	0.567	1021	985	0.9	1.3	4.584	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	556	139	1403	1186	0.469	555	364	0.5	0.9	5.691	A
2 - Copthorne Common Road	1037	259	676	1394	0.744	1031	1282	1.4	2.8	9.779	A
3 - Copthorne Hotel	9	2	1698	649	0.014	9	10	0.0	0.0	5.621	A
4 - Copthorne Road	683	171	1042	1267	0.539	681	664	0.7	1.2	6.125	A
5 - Copthorne Way	1253	313	519	1748	0.717	1248	1204	1.3	2.5	7.136	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	556	139	1408	1183	0.470	556	366	0.9	0.9	5.741	A
2 - Copthorne Common Road	1037	259	678	1393	0.745	1037	1286	2.8	2.9	10.093	B
3 - Copthorne Hotel	9	2	1705	646	0.014	9	10	0.0	0.0	5.652	A
4 - Copthorne Road	683	171	1047	1264	0.540	683	667	1.2	1.2	6.192	A
5 - Copthorne Way	1253	313	521	1747	0.717	1253	1209	2.5	2.5	7.277	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	454	113	1155	1331	0.341	455	300	0.9	0.5	4.117	A
2 - Copthorne Common Road	847	212	556	1458	0.581	852	1054	2.9	1.4	5.997	A
3 - Copthorne Hotel	7	2	1400	788	0.009	7	8	0.0	0.0	4.611	A
4 - Copthorne Road	557	139	860	1372	0.406	559	547	1.2	0.7	4.438	A
5 - Copthorne Way	1023	256	427	1804	0.567	1028	992	2.5	1.3	4.668	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	380	95	965	1443	0.264	381	250	0.5	0.4	3.394	A
2 - Copthorne Common Road	709	177	465	1507	0.470	711	881	1.4	0.9	4.535	A
3 - Copthorne Hotel	6	2	1169	896	0.007	6	7	0.0	0.0	4.045	A
4 - Copthorne Road	467	117	718	1455	0.321	468	457	0.7	0.5	3.651	A
5 - Copthorne Way	857	214	357	1846	0.464	859	829	1.3	0.9	3.655	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - Copthorne Common Road	0.88	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.47	0.00	0.00	0.47	0.47			N/A	N/A
5 - Copthorne Way	0.86	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.51	0.05	0.54	1.31	1.40			N/A	N/A
2 - Copthorne Common Road	1.36	0.05	0.65	3.23	4.79			N/A	N/A
3 - Copthorne Hotel	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - Copthorne Road	0.68	0.08	0.79	1.37	1.44			N/A	N/A
5 - Copthorne Way	1.29	0.05	0.57	3.04	4.62			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.87	0.03	0.26	0.87	0.87			N/A	N/A
2 - Copthorne Common Road	2.79	0.03	0.29	2.79	9.67			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.15	0.03	0.26	1.15	1.15			N/A	N/A
5 - Copthorne Way	2.46	0.03	0.27	2.46	4.32			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.88	0.03	0.28	0.88	3.02			N/A	N/A
2 - Copthorne Common Road	2.85	0.03	0.27	2.85	3.75			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.16	0.03	0.27	1.16	1.90			N/A	N/A
5 - Copthorne Way	2.50	0.03	0.27	2.50	2.50			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.52	0.52	1.00	1.40	1.45			N/A	N/A
2 - Copthorne Common Road	1.41	0.06	0.89	3.08	4.41			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.69	0.17	0.92	1.38	1.44			N/A	N/A
5 - Copthorne Way	1.33	0.09	1.05	2.56	3.38			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - Copthorne Common Road	0.90	0.04	0.41	2.07	3.40			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.48	0.04	0.41	1.25	1.37			N/A	N/A
5 - Copthorne Way	0.87	0.05	0.48	1.83	2.71			N/A	N/A

2029 + Committed Development + Development (350 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookhill Road/Copthorne Roundabout	Standard Roundabout		1, 2, 3, 4, 5	11.84	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.84	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	Relationship type	Relationship
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Brookhill Road		ONE HOUR	✓	502	100.000
2 - Copthorne Common Road		ONE HOUR	✓	1153	100.000
3 - Copthorne Hotel		ONE HOUR	✓	8	100.000
4 - Copthorne Road		ONE HOUR	✓	780	100.000
5 - Copthorne Way		ONE HOUR	✓	1256	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	45	0	163	293
	2 - Copthorne Common Road	29	0	1	298	825
	3 - Copthorne Hotel	2	0	0	5	0
	4 - Copthorne Road	166	371	3	1	238
	5 - Copthorne Way	229	856	2	169	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	12	0	1	0
	2 - Copthorne Common Road	0	0	0	4	1
	3 - Copthorne Hotel	0	0	0	0	0
	4 - Copthorne Road	1	1	0	0	3
	5 - Copthorne Way	1	2	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Brookhill Road	0.48	5.94	0.9	3.1	A	460	690
2 - Copthorne Common Road	0.87	17.78	6.0	30.9	C	1058	1587
3 - Copthorne Hotel	0.01	5.73	0.0	0.5	A	7	10
4 - Copthorne Road	0.70	9.74	2.3	5.6	A	716	1074
5 - Copthorne Way	0.80	10.09	3.8	15.2	B	1152	1728

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	378	94	1051	1444	0.261	376	319	0.0	0.4	3.367	A
2 - Copthorne Common Road	868	217	474	1589	0.546	863	954	0.0	1.2	4.931	A
3 - Copthorne Hotel	6	1	1332	951	0.006	6	5	0.0	0.0	3.807	A
4 - Copthorne Road	587	147	861	1455	0.403	585	477	0.0	0.7	4.121	A
5 - Copthorne Way	945	236	430	1858	0.509	941	1016	0.0	1.0	3.910	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	451	113	1258	1324	0.341	450	382	0.4	0.5	4.119	A
2 - Copthorne Common Road	1037	259	567	1538	0.674	1033	1141	1.2	2.0	7.092	A
3 - Copthorne Hotel	7	2	1595	819	0.008	7	6	0.0	0.0	4.433	A
4 - Copthorne Road	701	175	1031	1360	0.516	700	571	0.7	1.1	5.442	A
5 - Copthorne Way	1129	282	514	1807	0.624	1126	1216	1.0	1.6	5.266	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	552	138	1535	1163	0.475	551	466	0.5	0.9	5.869	A
2 - Copthorne Common Road	1270	317	693	1469	0.864	1255	1393	2.0	5.6	15.878	C
3 - Copthorne Hotel	8	2	1941	644	0.013	8	7	0.0	0.0	5.662	A
4 - Copthorne Road	859	215	1254	1234	0.696	854	695	1.1	2.2	9.371	A
5 - Copthorne Way	1382	346	627	1740	0.795	1374	1481	1.6	3.7	9.635	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	552	138	1544	1158	0.477	552	469	0.9	0.9	5.945	A
2 - Copthorne Common Road	1270	317	695	1467	0.865	1268	1401	5.6	6.0	17.777	C
3 - Copthorne Hotel	8	2	1957	636	0.013	8	7	0.0	0.0	5.733	A
4 - Copthorne Road	859	215	1265	1228	0.700	859	700	2.2	2.3	9.737	A
5 - Copthorne Way	1382	346	631	1738	0.795	1382	1493	3.7	3.8	10.086	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	451	113	1270	1317	0.342	452	386	0.9	0.5	4.173	A
2 - Copthorne Common Road	1037	259	570	1536	0.675	1052	1152	6.0	2.1	7.669	A
3 - Copthorne Hotel	7	2	1617	808	0.008	7	6	0.0	0.0	4.497	A
4 - Copthorne Road	701	175	1046	1351	0.519	706	578	2.3	1.1	5.621	A
5 - Copthorne Way	1129	282	519	1805	0.625	1137	1233	3.8	1.7	5.460	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	378	94	1059	1440	0.262	378	322	0.5	0.4	3.393	A
2 - Copthorne Common Road	868	217	477	1587	0.547	872	961	2.1	1.2	5.059	A
3 - Copthorne Hotel	6	1	1344	945	0.006	6	5	0.0	0.0	3.830	A
4 - Copthorne Road	587	147	869	1451	0.405	589	480	1.1	0.7	4.183	A
5 - Copthorne Way	945	236	433	1856	0.509	948	1025	1.7	1.0	3.975	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - Copthorne Common Road	1.19	0.56	1.07	1.21	1.61			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.67	0.55	1.00	1.40	1.45			N/A	N/A
5 - Copthorne Way	1.03	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.51	0.05	0.55	1.31	1.41			N/A	N/A
2 - Copthorne Common Road	2.02	0.05	0.47	5.47	8.88			N/A	N/A
3 - Copthorne Hotel	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - Copthorne Road	1.05	0.06	0.72	2.11	2.97			N/A	N/A
5 - Copthorne Way	1.64	0.05	0.46	4.30	6.91			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.89	0.03	0.26	0.89	0.89			N/A	N/A
2 - Copthorne Common Road	5.65	0.04	0.37	13.21	30.88			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	2.22	0.03	0.28	2.22	5.57			N/A	N/A
5 - Copthorne Way	3.68	0.03	0.30	3.68	15.24			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.90	0.03	0.28	0.90	3.13			N/A	N/A
2 - Copthorne Common Road	5.99	0.03	0.31	5.99	26.91			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	2.28	0.03	0.27	2.28	3.37			N/A	N/A
5 - Copthorne Way	3.78	0.03	0.27	3.78	5.92			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.52	0.52	1.00	1.40	1.45			N/A	N/A
2 - Copthorne Common Road	2.13	0.05	0.45	5.80	9.69			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.09	0.08	0.91	1.94	2.69			N/A	N/A
5 - Copthorne Way	1.70	0.06	0.82	4.14	6.11			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.36	0.03	0.26	0.46	0.49			N/A	N/A
2 - Copthorne Common Road	1.22	0.03	0.33	2.69	6.20			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.68	0.04	0.42	1.41	1.99			N/A	N/A
5 - Copthorne Way	1.05	0.04	0.38	2.64	4.59			N/A	N/A

2029 + Committed Development + Development (450 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookhill Road/Copthorne Roundabout	Standard Roundabout		1, 2, 3, 4, 5	7.97	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.97	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	Relationship type	Relationship
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Brookhill Road		ONE HOUR	✓	505	100.000
2 - Copthorne Common Road		ONE HOUR	✓	964	100.000
3 - Copthorne Hotel		ONE HOUR	✓	8	100.000
4 - Copthorne Road		ONE HOUR	✓	622	100.000
5 - Copthorne Way		ONE HOUR	✓	1143	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	3	43	0	168	291
	2 - Copthorne Common Road	5	1	1	294	663
	3 - Copthorne Hotel	3	1	0	3	1
	4 - Copthorne Road	122	336	3	1	160
	5 - Copthorne Way	199	794	5	145	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	2	0	4	4
	2 - Copthorne Common Road	0	0	0	3	9
	3 - Copthorne Hotel	0	100	0	0	0
	4 - Copthorne Road	2	5	0	0	9
	5 - Copthorne Way	3	5	40	8	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Brookhill Road	0.47	5.78	0.9	3.0	A	463	695
2 - Copthorne Common Road	0.76	10.83	3.1	12.0	B	884	1327
3 - Copthorne Hotel	0.01	5.76	0.0	0.5	A	7	11
4 - Copthorne Road	0.55	6.33	1.2	1.9	A	571	856
5 - Copthorne Way	0.72	7.38	2.5	4.7	A	1049	1573

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	380	95	964	1443	0.263	379	249	0.0	0.4	3.378	A
2 - Copthorne Common Road	726	181	462	1508	0.481	722	881	0.0	0.9	4.558	A
3 - Copthorne Hotel	6	2	1177	892	0.007	6	7	0.0	0.0	4.061	A
4 - Copthorne Road	468	117	725	1450	0.323	466	458	0.0	0.5	3.652	A
5 - Copthorne Way	861	215	356	1846	0.466	857	836	0.0	0.9	3.628	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	454	113	1154	1332	0.341	453	298	0.4	0.5	4.095	A
2 - Copthorne Common Road	866	217	553	1459	0.594	864	1054	0.9	1.4	6.025	A
3 - Copthorne Hotel	7	2	1409	784	0.009	7	8	0.0	0.0	4.635	A
4 - Copthorne Road	559	140	868	1367	0.409	558	548	0.5	0.7	4.443	A
5 - Copthorne Way	1028	257	426	1804	0.570	1026	1000	0.9	1.3	4.615	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	556	139	1411	1182	0.471	555	364	0.5	0.9	5.729	A
2 - Copthorne Common Road	1061	265	676	1393	0.762	1055	1289	1.4	3.0	10.432	B
3 - Copthorne Hotel	9	2	1721	638	0.014	9	10	0.0	0.0	5.721	A
4 - Copthorne Road	685	171	1060	1256	0.545	683	669	0.7	1.2	6.258	A
5 - Copthorne Way	1258	315	521	1747	0.720	1254	1222	1.3	2.5	7.227	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	556	139	1416	1179	0.472	556	366	0.9	0.9	5.780	A
2 - Copthorne Common Road	1061	265	678	1392	0.762	1061	1293	3.0	3.1	10.830	B
3 - Copthorne Hotel	9	2	1729	634	0.014	9	10	0.0	0.0	5.755	A
4 - Copthorne Road	685	171	1066	1253	0.546	685	672	1.2	1.2	6.332	A
5 - Copthorne Way	1258	315	523	1746	0.721	1258	1227	2.5	2.5	7.375	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	454	113	1161	1328	0.342	455	300	0.9	0.5	4.133	A
2 - Copthorne Common Road	866	217	556	1458	0.594	873	1061	3.1	1.5	6.220	A
3 - Copthorne Hotel	7	2	1421	778	0.009	7	8	0.0	0.0	4.669	A
4 - Copthorne Road	559	140	876	1363	0.410	561	552	1.2	0.7	4.497	A
5 - Copthorne Way	1028	257	428	1803	0.570	1032	1008	2.5	1.3	4.703	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	380	95	970	1440	0.264	381	250	0.5	0.4	3.404	A
2 - Copthorne Common Road	726	181	465	1507	0.482	728	886	1.5	0.9	4.634	A
3 - Copthorne Hotel	6	2	1186	888	0.007	6	7	0.0	0.0	4.081	A
4 - Copthorne Road	468	117	731	1447	0.323	469	461	0.7	0.5	3.684	A
5 - Copthorne Way	861	215	358	1845	0.466	862	842	1.3	0.9	3.672	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - Copthorne Common Road	0.92	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.47	0.00	0.00	0.47	0.47			N/A	N/A
5 - Copthorne Way	0.87	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.51	0.05	0.56	1.31	1.41			N/A	N/A
2 - Copthorne Common Road	1.44	0.05	0.61	3.53	5.28			N/A	N/A
3 - Copthorne Hotel	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - Copthorne Road	0.69	0.08	0.79	1.38	1.45			N/A	N/A
5 - Copthorne Way	1.31	0.05	0.56	3.11	4.70			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.88	0.03	0.26	0.88	0.88			N/A	N/A
2 - Copthorne Common Road	3.05	0.03	0.29	3.05	12.01			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.18	0.03	0.26	1.18	1.18			N/A	N/A
5 - Copthorne Way	2.51	0.03	0.27	2.51	4.67			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.89	0.03	0.28	0.89	3.02			N/A	N/A
2 - Copthorne Common Road	3.12	0.03	0.27	3.12	5.06			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.19	0.03	0.27	1.19	1.90			N/A	N/A
5 - Copthorne Way	2.54	0.03	0.27	2.54	2.54			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.52	0.52	1.00	1.40	1.45			N/A	N/A
2 - Copthorne Common Road	1.49	0.06	0.83	3.48	4.98			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.70	0.17	0.91	1.38	1.44			N/A	N/A
5 - Copthorne Way	1.34	0.09	1.05	2.62	3.50			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.36	0.03	0.26	0.46	0.49			N/A	N/A
2 - Copthorne Common Road	0.94	0.04	0.39	2.28	3.81			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.48	0.04	0.42	1.26	1.38			N/A	N/A
5 - Copthorne Way	0.88	0.05	0.48	1.86	2.78			N/A	N/A

2029 + Committed Development + Development (450 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Brookhill Road/Copthorne Roundabout	Standard Roundabout		1, 2, 3, 4, 5	12.33	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	12.33	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	Relationship type	Relationship
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Brookhill Road		ONE HOUR	✓	502	100.000
2 - Copthorne Common Road		ONE HOUR	✓	1161	100.000
3 - Copthorne Hotel		ONE HOUR	✓	8	100.000
4 - Copthorne Road		ONE HOUR	✓	785	100.000
5 - Copthorne Way		ONE HOUR	✓	1271	100.000

Origin-Destination Data

Demand (Veh/hr)

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	45	0	163	293
	2 - Copthorne Common Road	29	0	1	300	831
	3 - Copthorne Hotel	2	0	0	5	0
	4 - Copthorne Road	166	376	3	1	238
	5 - Copthorne Way	229	871	2	169	0

Vehicle Mix

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

Heavy Vehicle %

		To				
		1 - Brookhill Road	2 - Copthorne Common Road	3 - Copthorne Hotel	4 - Copthorne Road	5 - Copthorne Way
From	1 - Brookhill Road	0	12	0	1	0
	2 - Copthorne Common Road	0	0	0	4	1
	3 - Copthorne Hotel	0	0	0	0	0
	4 - Copthorne Road	1	1	0	0	3
	5 - Copthorne Way	1	2	0	7	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Brookhill Road	0.48	6.07	0.9	3.1	A	460	690
2 - Copthorne Common Road	0.87	18.52	6.3	32.1	C	1065	1598
3 - Copthorne Hotel	0.01	5.77	0.0	0.5	A	7	10
4 - Copthorne Road	0.71	9.97	2.3	6.1	A	720	1080
5 - Copthorne Way	0.81	10.66	4.0	17.3	B	1166	1749

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	378	94	1066	1435	0.263	376	319	0.0	0.4	3.394	A
2 - Copthorne Common Road	874	219	474	1589	0.550	869	968	0.0	1.2	4.972	A
3 - Copthorne Hotel	6	1	1338	948	0.006	6	5	0.0	0.0	3.819	A
4 - Copthorne Road	591	148	866	1453	0.407	588	478	0.0	0.7	4.149	A
5 - Copthorne Way	957	239	433	1856	0.515	952	1021	0.0	1.1	3.966	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	451	113	1276	1314	0.343	450	382	0.4	0.5	4.167	A
2 - Copthorne Common Road	1044	261	567	1538	0.679	1040	1159	1.2	2.1	7.187	A
3 - Copthorne Hotel	7	2	1602	815	0.008	7	6	0.0	0.0	4.452	A
4 - Copthorne Road	705	176	1036	1357	0.520	704	572	0.7	1.1	5.498	A
5 - Copthorne Way	1142	286	518	1805	0.633	1140	1221	1.1	1.7	5.390	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	552	138	1556	1150	0.480	551	466	0.5	0.9	5.985	A
2 - Copthorne Common Road	1278	320	693	1469	0.870	1263	1414	2.1	5.9	16.401	C
3 - Copthorne Hotel	8	2	1949	640	0.013	8	7	0.0	0.0	5.697	A
4 - Copthorne Road	864	216	1260	1230	0.702	859	697	1.1	2.3	9.570	A
5 - Copthorne Way	1399	350	632	1737	0.805	1390	1487	1.7	3.9	10.123	B

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	552	138	1565	1145	0.482	552	469	0.9	0.9	6.069	A
2 - Copthorne Common Road	1278	320	695	1467	0.871	1277	1422	5.9	6.3	18.520	C
3 - Copthorne Hotel	8	2	1965	632	0.013	8	7	0.0	0.0	5.772	A
4 - Copthorne Road	864	216	1271	1224	0.706	864	702	2.3	2.3	9.967	A
5 - Copthorne Way	1399	350	636	1735	0.806	1398	1499	3.9	4.0	10.659	B

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	451	113	1288	1306	0.345	452	386	0.9	0.5	4.224	A
2 - Copthorne Common Road	1044	261	571	1536	0.680	1060	1170	6.3	2.2	7.820	A
3 - Copthorne Hotel	7	2	1625	803	0.008	7	6	0.0	0.0	4.518	A
4 - Copthorne Road	705	176	1052	1348	0.523	710	580	2.3	1.1	5.690	A
5 - Copthorne Way	1142	286	523	1802	0.634	1151	1239	4.0	1.8	5.606	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Brookhill Road	378	94	1074	1431	0.264	378	322	0.5	0.4	3.421	A
2 - Copthorne Common Road	874	219	477	1587	0.551	878	975	2.2	1.2	5.103	A
3 - Copthorne Hotel	6	1	1350	942	0.006	6	5	0.0	0.0	3.843	A
4 - Copthorne Road	591	148	873	1449	0.408	592	482	1.1	0.7	4.211	A
5 - Copthorne Way	957	239	436	1854	0.516	959	1029	1.8	1.1	4.035	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - Copthorne Common Road	1.21	0.56	1.09	1.35	1.67			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.68	0.55	1.00	1.40	1.45			N/A	N/A
5 - Copthorne Way	1.05	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.52	0.05	0.58	1.32	1.41			N/A	N/A
2 - Copthorne Common Road	2.06	0.05	0.47	5.59	9.11			N/A	N/A
3 - Copthorne Hotel	0.01	0.01	0.25	0.45	0.48			N/A	N/A
4 - Copthorne Road	1.07	0.06	0.71	2.20	3.09			N/A	N/A
5 - Copthorne Way	1.70	0.05	0.46	4.50	7.30			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.91	0.03	0.26	0.91	0.91			N/A	N/A
2 - Copthorne Common Road	5.88	0.04	0.38	14.28	32.09			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	2.28	0.03	0.28	2.28	6.14			N/A	N/A
5 - Copthorne Way	3.91	0.03	0.30	3.91	17.33			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.92	0.03	0.28	0.92	3.14			N/A	N/A
2 - Copthorne Common Road	6.27	0.03	0.31	6.94	29.25			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	2.35	0.03	0.27	2.35	3.63			N/A	N/A
5 - Copthorne Way	4.04	0.03	0.28	4.04	7.56			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.53	0.53	1.00	1.40	1.45			N/A	N/A
2 - Copthorne Common Road	2.17	0.04	0.45	5.94	10.01			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	1.11	0.07	0.90	2.00	2.80			N/A	N/A
5 - Copthorne Way	1.76	0.06	0.76	4.42	6.63			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Brookhill Road	0.36	0.03	0.26	0.47	0.49			N/A	N/A
2 - Copthorne Common Road	1.24	0.03	0.33	2.67	6.32			N/A	N/A
3 - Copthorne Hotel	0.01	0.00	0.00	0.01	0.01			N/A	N/A
4 - Copthorne Road	0.69	0.04	0.42	1.46	2.14			N/A	N/A
5 - Copthorne Way	1.08	0.04	0.37	2.70	4.84			N/A	N/A

Junctions 10

ARCADY 10 - Roundabout Module

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Filename: Copthorne Way Roundabout - 2024.j10
Path: T:\Projects\9000 Series Project Numbers\9155ITB Wychwood, Turners Hill Rd, Crawley Down\Tech\Assessments\Arcady\2024
Report generation date: 07/03/2024 14:56:51

»2023 Observed, AM
»2023 Observed, PM
»2029 Future Year, AM
»2029 Future Year, PM
»2029 + Committed Development, AM
»2029 + Committed Development, PM
»2029 + Committed Development + Development (350 Homes), AM
»2029 + Committed Development + Development (350 Homes), PM
»2029 + Committed Development + Development (450 Homes), AM
»2029 + Committed Development + Development (450 Homes), PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
	2023 Observed					
1 - Worsell Drive	0.3	4.72	0.21	0.2	4.67	0.19
2 - Copthorne Way (E)	1.6	5.33	0.62	2.1	5.88	0.67
3 - Copthorne Way (W)	1.3	4.11	0.57	1.5	4.26	0.60
	2029 Future Year					
1 - Worsell Drive	0.3	5.06	0.23	0.3	5.12	0.22
2 - Copthorne Way (E)	1.9	6.01	0.66	2.7	7.13	0.73
3 - Copthorne Way (W)	1.6	4.51	0.61	1.8	4.86	0.65
	2029 + Committed Development					
1 - Worsell Drive	1.0	7.97	0.51	0.8	7.41	0.46
2 - Copthorne Way (E)	2.7	8.05	0.73	4.4	11.32	0.82
3 - Copthorne Way (W)	2.0	5.30	0.66	3.2	7.49	0.76
	2029 + Committed Development + Development (350 Homes)					
1 - Worsell Drive	1.1	8.20	0.52	0.9	7.96	0.48
2 - Copthorne Way (E)	3.3	9.35	0.77	4.9	12.33	0.84
3 - Copthorne Way (W)	2.1	5.48	0.67	3.7	8.49	0.79
	2029 + Committed Development + Development (450 Homes)					
1 - Worsell Drive	1.1	8.27	0.52	0.9	8.14	0.48
2 - Copthorne Way (E)	3.5	9.82	0.78	5.0	12.60	0.84
3 - Copthorne Way (W)	2.1	5.53	0.68	3.9	8.83	0.80

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

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

File summary

File Description

Title	
Location	
Site number	
Date	15/02/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\basingstoke.hotdesk
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use 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	Relationship type	Relationship
D1	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓		
D2	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓		
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2
D5	Committed Development	AM	ONE HOUR	07:00	08:30	15			
D6	Committed Development	PM	ONE HOUR	16:30	18:00	15			
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6
D9	Development 350 Homes	AM	ONE HOUR	07:00	08:30	15			
D10	Development 350 Homes	PM	ONE HOUR	16:30	18:00	15			
D11	Development 450 Homes	AM	ONE HOUR	07:00	08:30	15			
D12	Development 450 Homes	PM	ONE HOUR	16:30	18:00	15			
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2023-2029 AM		1.0644
G2			1.0794

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2023 Observed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Copthorne Way (W) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Copthorne Way Roundabout	Standard Roundabout		1, 2, 3	4.71	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.71	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Worsell Drive		
2	Copthorne Way (E)		
3	Copthorne Way (W)		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Worsell Drive	3.50	7.00	12.7	20.0	52.0	27.0		
2 - Copthorne Way (E)	4.00	7.00	27.0	45.0	52.0	19.0		
3 - Copthorne Way (W)	4.30	7.00	50.0	45.0	52.0	7.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Worsell Drive	0.591	1641
2 - Copthorne Way (E)	0.675	2006
3 - Copthorne Way (W)	0.726	2214

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	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Worsell Drive		ONE HOUR	✓	183	100.000
2 - Copthorne Way (E)		ONE HOUR	✓	999	100.000
3 - Copthorne Way (W)		ONE HOUR	✓	1071	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	74	109
	2 - Copthorne Way (E)	44	3	952
	3 - Copthorne Way (W)	158	913	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	1	7
	2 - Copthorne Way (E)	11	0	8
	3 - Copthorne Way (W)	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Worsell Drive	0.21	4.72	0.3	1.1	A	168	252
2 - Copthorne Way (E)	0.62	5.33	1.6	2.5	A	917	1375
3 - Copthorne Way (W)	0.57	4.11	1.3	1.8	A	983	1474

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	138	34	687	1157	0.119	137	152	0.0	0.1	3.527	A
2 - Copthorne Way (E)	752	188	82	1801	0.418	749	743	0.0	0.7	3.416	A
3 - Copthorne Way (W)	806	202	35	2068	0.390	804	796	0.0	0.6	2.840	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	165	41	823	1076	0.153	164	181	0.1	0.2	3.947	A
2 - Copthorne Way (E)	898	225	98	1790	0.502	897	889	0.7	1.0	4.027	A
3 - Copthorne Way (W)	963	241	42	2063	0.467	962	953	0.6	0.9	3.266	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	201	50	1007	966	0.209	201	222	0.2	0.3	4.706	A
2 - Copthorne Way (E)	1100	275	120	1775	0.620	1097	1088	1.0	1.6	5.293	A
3 - Copthorne Way (W)	1179	295	52	2056	0.574	1177	1166	0.9	1.3	4.090	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	201	50	1009	965	0.209	201	222	0.3	0.3	4.715	A
2 - Copthorne Way (E)	1100	275	120	1775	0.620	1100	1090	1.6	1.6	5.332	A
3 - Copthorne Way (W)	1179	295	52	2056	0.574	1179	1168	1.3	1.3	4.106	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	165	41	825	1075	0.153	165	182	0.3	0.2	3.959	A
2 - Copthorne Way (E)	898	225	98	1790	0.502	900	892	1.6	1.0	4.059	A
3 - Copthorne Way (W)	963	241	42	2063	0.467	965	956	1.3	0.9	3.285	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	138	34	690	1155	0.119	138	152	0.2	0.1	3.540	A
2 - Copthorne Way (E)	752	188	82	1800	0.418	753	746	1.0	0.7	3.444	A
3 - Copthorne Way (W)	806	202	35	2068	0.390	807	800	0.9	0.6	2.856	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.13	0.00	0.00	0.13	0.13			N/A	N/A
2 - Copthorne Way (E)	0.71	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Way (W)	0.64	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.18	0.00	0.00	0.18	0.18			N/A	N/A
2 - Copthorne Way (E)	1.00	0.07	0.81	1.83	2.51			N/A	N/A
3 - Copthorne Way (W)	0.87	0.07	0.81	1.42	1.82			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.26	0.03	0.25	0.46	0.48			N/A	N/A
2 - Copthorne Way (E)	1.60	0.03	0.26	1.60	1.60			N/A	N/A
3 - Copthorne Way (W)	1.33	0.03	0.26	1.33	1.33			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.26	0.03	0.28	0.68	1.10			N/A	N/A
2 - Copthorne Way (E)	1.62	0.03	0.26	1.62	1.62			N/A	N/A
3 - Copthorne Way (W)	1.34	0.03	0.26	1.34	1.34			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.18	0.00	0.00	0.18	0.18			N/A	N/A
2 - Copthorne Way (E)	1.02	0.22	1.02	1.35	1.70			N/A	N/A
3 - Copthorne Way (W)	0.88	0.52	0.99	1.41	1.46			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.14	0.00	0.00	0.14	0.14			N/A	N/A
2 - Copthorne Way (E)	0.72	0.07	0.75	1.13	1.13			N/A	N/A
3 - Copthorne Way (W)	0.64	0.09	0.81	1.36	1.43			N/A	N/A

2023 Observed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Copthorne Way (W) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Copthorne Way Roundabout	Standard Roundabout		1, 2, 3	5.05	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.05	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	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Worsell Drive		ONE HOUR	✓	167	100.000
2 - Copthorne Way (E)		ONE HOUR	✓	1152	100.000
3 - Copthorne Way (W)		ONE HOUR	✓	1137	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	1	49	117
	2 - Copthorne Way (E)	82	5	1065
	3 - Copthorne Way (W)	126	1010	1

Vehicle Mix

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

Heavy Vehicle %

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	2	1
	2 - Copthorne Way (E)	1	0	2
	3 - Copthorne Way (W)	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Worsell Drive	0.19	4.67	0.2	0.6	A	153	230
2 - Copthorne Way (E)	0.67	5.88	2.1	3.8	A	1057	1586
3 - Copthorne Way (W)	0.60	4.26	1.5	2.2	A	1043	1565

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	126	31	762	1166	0.108	125	157	0.0	0.1	3.456	A
2 - Copthorne Way (E)	867	217	89	1908	0.455	864	798	0.0	0.8	3.436	A
3 - Copthorne Way (W)	856	214	66	2119	0.404	853	887	0.0	0.7	2.838	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	150	38	912	1077	0.139	150	188	0.1	0.2	3.884	A
2 - Copthorne Way (E)	1036	259	107	1896	0.546	1034	956	0.8	1.2	4.169	A
3 - Copthorne Way (W)	1022	256	79	2110	0.484	1021	1062	0.7	0.9	3.303	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	184	46	1117	955	0.193	184	230	0.2	0.2	4.662	A
2 - Copthorne Way (E)	1268	317	131	1880	0.675	1265	1169	1.2	2.0	5.817	A
3 - Copthorne Way (W)	1252	313	97	2097	0.597	1250	1299	0.9	1.5	4.238	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	184	46	1119	954	0.193	184	230	0.2	0.2	4.673	A
2 - Copthorne Way (E)	1268	317	131	1880	0.675	1268	1171	2.0	2.1	5.881	A
3 - Copthorne Way (W)	1252	313	97	2097	0.597	1252	1302	1.5	1.5	4.259	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	150	38	915	1075	0.140	150	188	0.2	0.2	3.895	A
2 - Copthorne Way (E)	1036	259	107	1896	0.546	1039	958	2.1	1.2	4.217	A
3 - Copthorne Way (W)	1022	256	79	2110	0.485	1024	1067	1.5	0.9	3.322	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	126	31	766	1164	0.108	126	158	0.2	0.1	3.467	A
2 - Copthorne Way (E)	867	217	90	1908	0.455	869	802	1.2	0.8	3.471	A
3 - Copthorne Way (W)	856	214	66	2119	0.404	857	892	0.9	0.7	2.854	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Copthorne Way (E)	0.83	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Way (W)	0.67	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - Copthorne Way (E)	1.19	0.06	0.69	2.66	3.81			N/A	N/A
3 - Copthorne Way (W)	0.93	0.07	0.79	1.69	2.18			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.24	0.03	0.25	0.46	0.48			N/A	N/A
2 - Copthorne Way (E)	2.03	0.03	0.27	2.03	2.03			N/A	N/A
3 - Copthorne Way (W)	1.46	0.03	0.26	1.46	1.46			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.24	0.03	0.27	0.48	0.65			N/A	N/A
2 - Copthorne Way (E)	2.05	0.03	0.26	2.05	2.05			N/A	N/A
3 - Copthorne Way (W)	1.47	0.03	0.26	1.47	1.47			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.16	0.00	0.00	0.16	0.16			N/A	N/A
2 - Copthorne Way (E)	1.22	0.13	1.10	1.91	2.50			N/A	N/A
3 - Copthorne Way (W)	0.95	0.50	1.00	1.01	1.01			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.12	0.00	0.00	0.12	0.12			N/A	N/A
2 - Copthorne Way (E)	0.84	0.06	0.70	1.50	1.92			N/A	N/A
3 - Copthorne Way (W)	0.68	0.09	0.81	1.37	1.44			N/A	N/A

2029 Future Year, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Copthorne Way (W) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Copthorne Way Roundabout	Standard Roundabout		1, 2, 3	5.23	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.23	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	Relationship type	Relationship
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Worsell Drive		ONE HOUR	✓	195	100.000
2 - Copthorne Way (E)		ONE HOUR	✓	1063	100.000
3 - Copthorne Way (W)		ONE HOUR	✓	1140	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	79	116
	2 - Copthorne Way (E)	47	3	1013
	3 - Copthorne Way (W)	168	972	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	1	7
	2 - Copthorne Way (E)	11	0	8
	3 - Copthorne Way (W)	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Worsell Drive	0.23	5.06	0.3	1.3	A	179	268
2 - Copthorne Way (E)	0.66	6.01	1.9	3.4	A	976	1464
3 - Copthorne Way (W)	0.61	4.51	1.6	2.5	A	1046	1569

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	147	37	732	1131	0.130	146	161	0.0	0.1	3.654	A
2 - Copthorne Way (E)	801	200	87	1797	0.445	797	791	0.0	0.8	3.589	A
3 - Copthorne Way (W)	858	215	38	2067	0.415	855	847	0.0	0.7	2.967	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	175	44	876	1044	0.168	175	193	0.1	0.2	4.139	A
2 - Copthorne Way (E)	956	239	104	1786	0.535	955	946	0.8	1.1	4.325	A
3 - Copthorne Way (W)	1025	256	45	2061	0.497	1024	1014	0.7	1.0	3.468	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	214	54	1072	927	0.231	214	236	0.2	0.3	5.047	A
2 - Copthorne Way (E)	1171	293	128	1770	0.661	1168	1158	1.1	1.9	5.945	A
3 - Copthorne Way (W)	1255	314	55	2053	0.611	1253	1240	1.0	1.6	4.484	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	214	54	1073	926	0.232	214	237	0.3	0.3	5.059	A
2 - Copthorne Way (E)	1171	293	128	1770	0.662	1171	1160	1.9	1.9	6.006	A
3 - Copthorne Way (W)	1255	314	55	2053	0.611	1255	1243	1.6	1.6	4.510	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	175	44	878	1043	0.168	175	194	0.3	0.2	4.154	A
2 - Copthorne Way (E)	956	239	105	1785	0.535	959	949	1.9	1.2	4.374	A
3 - Copthorne Way (W)	1025	256	45	2061	0.497	1027	1018	1.6	1.0	3.489	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	147	37	735	1129	0.130	147	162	0.2	0.2	3.669	A
2 - Copthorne Way (E)	801	200	87	1797	0.446	802	794	1.2	0.8	3.625	A
3 - Copthorne Way (W)	858	215	38	2066	0.415	859	852	1.0	0.7	2.984	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Copthorne Way (E)	0.80	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Way (W)	0.71	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - Copthorne Way (E)	1.14	0.06	0.76	2.42	3.40			N/A	N/A
3 - Copthorne Way (W)	0.98	0.06	0.78	1.83	2.52			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.30	0.03	0.25	0.46	0.48			N/A	N/A
2 - Copthorne Way (E)	1.92	0.03	0.27	1.92	1.92			N/A	N/A
3 - Copthorne Way (W)	1.55	0.03	0.26	1.55	1.55			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.30	0.03	0.31	1.00	1.27			N/A	N/A
2 - Copthorne Way (E)	1.94	0.03	0.26	1.94	1.94			N/A	N/A
3 - Copthorne Way (W)	1.56	0.03	0.26	1.56	1.56			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.20	0.00	0.00	0.20	0.20			N/A	N/A
2 - Copthorne Way (E)	1.16	0.14	1.08	1.82	2.24			N/A	N/A
3 - Copthorne Way (W)	1.00	0.36	1.02	1.02	1.52			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.15	0.00	0.00	0.15	0.15			N/A	N/A
2 - Copthorne Way (E)	0.81	0.06	0.70	1.37	1.82			N/A	N/A
3 - Copthorne Way (W)	0.71	0.08	0.80	1.40	1.47			N/A	N/A

2029 Future Year, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Copthorne Way (W) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Copthorne Way Roundabout	Standard Roundabout		1, 2, 3	5.94	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.94	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	Relationship type	Relationship
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Worsell Drive		ONE HOUR	✓	180	100.000
2 - Copthorne Way (E)		ONE HOUR	✓	1243	100.000
3 - Copthorne Way (W)		ONE HOUR	✓	1227	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	1	53	126
	2 - Copthorne Way (E)	89	5	1150
	3 - Copthorne Way (W)	136	1090	1

Vehicle Mix

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

Heavy Vehicle %

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	2	1
	2 - Copthorne Way (E)	1	0	2
	3 - Copthorne Way (W)	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Worsell Drive	0.22	5.12	0.3	1.2	A	165	248
2 - Copthorne Way (E)	0.73	7.13	2.7	5.4	A	1141	1712
3 - Copthorne Way (W)	0.65	4.86	1.8	3.3	A	1126	1689

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	136	34	823	1130	0.120	135	169	0.0	0.1	3.616	A
2 - Copthorne Way (E)	936	234	96	1903	0.492	932	862	0.0	1.0	3.690	A
3 - Copthorne Way (W)	924	231	71	2115	0.437	921	957	0.0	0.8	3.006	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	162	41	985	1034	0.157	162	203	0.1	0.2	4.127	A
2 - Copthorne Way (E)	1118	279	115	1891	0.591	1116	1031	1.0	1.4	4.635	A
3 - Copthorne Way (W)	1103	276	85	2105	0.524	1102	1146	0.8	1.1	3.583	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	198	50	1205	903	0.220	198	248	0.2	0.3	5.107	A
2 - Copthorne Way (E)	1369	342	141	1873	0.731	1364	1262	1.4	2.6	7.003	A
3 - Copthorne Way (W)	1351	338	104	2092	0.646	1348	1401	1.1	1.8	4.825	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	198	50	1207	901	0.220	198	248	0.3	0.3	5.122	A
2 - Copthorne Way (E)	1369	342	141	1873	0.731	1369	1264	2.6	2.7	7.134	A
3 - Copthorne Way (W)	1351	338	105	2091	0.646	1351	1406	1.8	1.8	4.863	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	162	41	988	1032	0.157	162	203	0.3	0.2	4.145	A
2 - Copthorne Way (E)	1118	279	116	1890	0.591	1123	1035	2.7	1.5	4.718	A
3 - Copthorne Way (W)	1103	276	86	2105	0.524	1106	1153	1.8	1.1	3.613	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	136	34	827	1128	0.120	136	170	0.2	0.1	3.632	A
2 - Copthorne Way (E)	936	234	97	1903	0.492	938	866	1.5	1.0	3.737	A
3 - Copthorne Way (W)	924	231	72	2115	0.437	925	963	1.1	0.8	3.030	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.14	0.00	0.00	0.14	0.14			N/A	N/A
2 - Copthorne Way (E)	0.96	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Way (W)	0.77	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.18	0.00	0.00	0.18	0.18			N/A	N/A
2 - Copthorne Way (E)	1.43	0.05	0.52	3.55	5.41			N/A	N/A
3 - Copthorne Way (W)	1.09	0.06	0.70	2.30	3.26			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.28	0.03	0.25	0.46	0.48			N/A	N/A
2 - Copthorne Way (E)	2.64	0.03	0.28	2.64	4.99			N/A	N/A
3 - Copthorne Way (W)	1.80	0.03	0.26	1.80	1.80			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.28	0.03	0.30	0.88	1.20			N/A	N/A
2 - Copthorne Way (E)	2.68	0.03	0.27	2.68	2.68			N/A	N/A
3 - Copthorne Way (W)	1.81	0.03	0.26	1.81	1.81			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.19	0.00	0.00	0.19	0.19			N/A	N/A
2 - Copthorne Way (E)	1.46	0.08	1.09	2.93	3.96			N/A	N/A
3 - Copthorne Way (W)	1.11	0.22	1.08	1.60	1.86			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.14	0.00	0.00	0.14	0.14			N/A	N/A
2 - Copthorne Way (E)	0.98	0.05	0.49	2.13	3.18			N/A	N/A
3 - Copthorne Way (W)	0.78	0.07	0.78	1.49	1.51			N/A	N/A

2029 + Committed Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Copthorne Way (W) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Copthorne Way Roundabout	Standard Roundabout		1, 2, 3	6.83	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.83	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	Relationship type	Relationship
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Worsell Drive		ONE HOUR	✓	431	100.000
2 - Copthorne Way (E)		ONE HOUR	✓	1107	100.000
3 - Copthorne Way (W)		ONE HOUR	✓	1217	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	176	255
	2 - Copthorne Way (E)	91	3	1013
	3 - Copthorne Way (W)	245	972	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	1	7
	2 - Copthorne Way (E)	11	0	8
	3 - Copthorne Way (W)	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Worsell Drive	0.51	7.97	1.0	3.1	A	395	593
2 - Copthorne Way (E)	0.73	8.05	2.7	6.3	A	1016	1524
3 - Copthorne Way (W)	0.66	5.30	2.0	3.7	A	1117	1675

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	324	81	731	1131	0.287	323	252	0.0	0.4	4.443	A
2 - Copthorne Way (E)	834	208	191	1726	0.483	830	863	0.0	0.9	4.003	A
3 - Copthorne Way (W)	916	229	70	2044	0.448	913	951	0.0	0.8	3.175	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	387	97	875	1045	0.371	387	302	0.4	0.6	5.463	A
2 - Copthorne Way (E)	995	249	229	1701	0.585	994	1033	0.9	1.4	5.079	A
3 - Copthorne Way (W)	1094	274	84	2033	0.538	1093	1138	0.8	1.2	3.824	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	474	119	1071	928	0.511	473	369	0.6	1.0	7.879	A
2 - Copthorne Way (E)	1219	305	280	1667	0.732	1214	1264	1.4	2.6	7.884	A
3 - Copthorne Way (W)	1340	335	103	2019	0.664	1337	1391	1.2	1.9	5.255	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	474	119	1073	926	0.512	474	370	1.0	1.0	7.966	A
2 - Copthorne Way (E)	1219	305	281	1666	0.732	1219	1267	2.6	2.7	8.048	A
3 - Copthorne Way (W)	1340	335	104	2018	0.664	1340	1396	1.9	2.0	5.305	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	387	97	879	1043	0.371	389	303	1.0	0.6	5.524	A
2 - Copthorne Way (E)	995	249	230	1700	0.586	1000	1038	2.7	1.4	5.187	A
3 - Copthorne Way (W)	1094	274	85	2033	0.538	1097	1146	2.0	1.2	3.862	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	324	81	735	1129	0.287	325	253	0.6	0.4	4.482	A
2 - Copthorne Way (E)	834	208	192	1725	0.483	836	868	1.4	0.9	4.057	A
3 - Copthorne Way (W)	916	229	71	2043	0.448	918	957	1.2	0.8	3.204	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.40	0.00	0.00	0.40	0.40			N/A	N/A
2 - Copthorne Way (E)	0.93	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Way (W)	0.81	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.58	0.08	0.77	1.35	1.43			N/A	N/A
2 - Copthorne Way (E)	1.39	0.05	0.60	3.39	5.03			N/A	N/A
3 - Copthorne Way (W)	1.15	0.06	0.68	2.56	3.68			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	1.03	0.03	0.26	1.03	1.03			N/A	N/A
2 - Copthorne Way (E)	2.64	0.03	0.28	2.64	6.32			N/A	N/A
3 - Copthorne Way (W)	1.94	0.03	0.26	1.94	1.94			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	1.04	0.03	0.28	1.04	3.10			N/A	N/A
2 - Copthorne Way (E)	2.68	0.03	0.27	2.68	2.68			N/A	N/A
3 - Copthorne Way (W)	1.96	0.03	0.26	1.96	1.96			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.60	0.09	0.80	1.36	1.43			N/A	N/A
2 - Copthorne Way (E)	1.43	0.08	1.03	2.94	4.03			N/A	N/A
3 - Copthorne Way (W)	1.18	0.16	1.10	1.78	2.07			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.41	0.03	0.33	1.08	1.29			N/A	N/A
2 - Copthorne Way (E)	0.94	0.05	0.46	2.09	3.21			N/A	N/A
3 - Copthorne Way (W)	0.82	0.07	0.75	1.31	1.77			N/A	N/A

2029 + Committed Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Copthorne Way (W) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Copthorne Way Roundabout	Standard Roundabout		1, 2, 3	9.10	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.10	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	Relationship type	Relationship
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Worsell Drive		ONE HOUR	✓	377	100.000
2 - Copthorne Way (E)		ONE HOUR	✓	1319	100.000
3 - Copthorne Way (W)		ONE HOUR	✓	1405	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	1	107	269
	2 - Copthorne Way (E)	165	5	1150
	3 - Copthorne Way (W)	314	1090	1

Vehicle Mix

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

Heavy Vehicle %

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	2	1
	2 - Copthorne Way (E)	1	0	2
	3 - Copthorne Way (W)	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Worsell Drive	0.46	7.41	0.8	3.4	A	346	519
2 - Copthorne Way (E)	0.82	11.32	4.4	20.4	B	1211	1816
3 - Copthorne Way (W)	0.76	7.49	3.2	8.1	A	1290	1934

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	284	71	822	1131	0.251	283	360	0.0	0.3	4.246	A
2 - Copthorne Way (E)	993	248	203	1833	0.542	989	902	0.0	1.2	4.245	A
3 - Copthorne Way (W)	1058	264	128	2070	0.511	1054	1064	0.0	1.0	3.528	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	339	85	984	1034	0.328	339	430	0.3	0.5	5.171	A
2 - Copthorne Way (E)	1186	297	244	1806	0.657	1183	1079	1.2	1.9	5.756	A
3 - Copthorne Way (W)	1263	316	153	2052	0.616	1261	1274	1.0	1.6	4.539	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	415	104	1203	904	0.459	414	525	0.5	0.8	7.325	A
2 - Copthorne Way (E)	1453	363	298	1770	0.821	1443	1319	1.9	4.3	10.717	B
3 - Copthorne Way (W)	1547	387	187	2028	0.763	1541	1554	1.6	3.1	7.304	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	415	104	1207	901	0.461	415	528	0.8	0.8	7.407	A
2 - Copthorne Way (E)	1453	363	299	1769	0.821	1452	1324	4.3	4.4	11.316	B
3 - Copthorne Way (W)	1547	387	188	2027	0.763	1547	1563	3.1	3.2	7.490	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	339	85	991	1030	0.329	341	434	0.8	0.5	5.229	A
2 - Copthorne Way (E)	1186	297	245	1805	0.657	1196	1086	4.4	2.0	6.006	A
3 - Copthorne Way (W)	1263	316	155	2051	0.616	1269	1286	3.2	1.6	4.644	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	284	71	827	1128	0.252	285	362	0.5	0.3	4.275	A
2 - Copthorne Way (E)	993	248	205	1832	0.542	996	907	2.0	1.2	4.324	A
3 - Copthorne Way (W)	1058	264	129	2069	0.511	1060	1072	1.6	1.1	3.577	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.33	0.00	0.00	0.33	0.33			N/A	N/A
2 - Copthorne Way (E)	1.17	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Way (W)	1.04	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.48	0.00	0.00	0.48	0.48			N/A	N/A
2 - Copthorne Way (E)	1.88	0.05	0.46	5.02	8.23			N/A	N/A
3 - Copthorne Way (W)	1.58	0.05	0.46	4.10	6.59			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.84	0.03	0.26	0.84	0.84			N/A	N/A
2 - Copthorne Way (E)	4.30	0.03	0.31	5.02	20.36			N/A	N/A
3 - Copthorne Way (W)	3.11	0.03	0.28	3.11	8.08			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.85	0.03	0.28	1.01	3.38			N/A	N/A
2 - Copthorne Way (E)	4.44	0.03	0.28	4.44	9.80			N/A	N/A
3 - Copthorne Way (W)	3.17	0.03	0.27	3.17	3.17			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - Copthorne Way (E)	1.95	0.05	0.67	5.07	7.81			N/A	N/A
3 - Copthorne Way (W)	1.63	0.07	1.05	3.62	4.98			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.34	0.03	0.26	0.46	0.49			N/A	N/A
2 - Copthorne Way (E)	1.20	0.04	0.37	3.00	5.66			N/A	N/A
3 - Copthorne Way (W)	1.05	0.04	0.44	2.55	3.92			N/A	N/A

2029 + Committed Development + Development (350 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Copthorne Way (W) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Copthorne Way Roundabout	Standard Roundabout		1, 2, 3	7.50	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.50	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	Relationship type	Relationship
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Worsell Drive		ONE HOUR	✓	431	100.000
2 - Copthorne Way (E)		ONE HOUR	✓	1164	100.000
3 - Copthorne Way (W)		ONE HOUR	✓	1237	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	176	255
	2 - Copthorne Way (E)	91	3	1070
	3 - Copthorne Way (W)	245	992	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	1	7
	2 - Copthorne Way (E)	11	0	8
	3 - Copthorne Way (W)	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Worsell Drive	0.52	8.20	1.1	3.2	A	395	593
2 - Copthorne Way (E)	0.77	9.35	3.3	11.3	A	1068	1603
3 - Copthorne Way (W)	0.67	5.48	2.1	3.9	A	1135	1703

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	324	81	746	1122	0.289	323	252	0.0	0.4	4.494	A
2 - Copthorne Way (E)	877	219	191	1726	0.508	872	878	0.0	1.0	4.198	A
3 - Copthorne Way (W)	931	233	70	2043	0.456	928	993	0.0	0.8	3.218	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	387	97	893	1034	0.375	387	302	0.4	0.6	5.552	A
2 - Copthorne Way (E)	1047	262	229	1701	0.615	1044	1051	1.0	1.6	5.467	A
3 - Copthorne Way (W)	1112	278	84	2033	0.547	1111	1189	0.8	1.2	3.897	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	474	119	1093	914	0.519	472	369	0.6	1.1	8.109	A
2 - Copthorne Way (E)	1282	320	280	1667	0.769	1275	1286	1.6	3.2	9.051	A
3 - Copthorne Way (W)	1362	340	103	2019	0.675	1359	1452	1.2	2.0	5.425	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	474	119	1095	913	0.520	474	370	1.1	1.1	8.204	A
2 - Copthorne Way (E)	1282	320	281	1666	0.769	1282	1289	3.2	3.3	9.348	A
3 - Copthorne Way (W)	1362	340	104	2018	0.675	1362	1459	2.0	2.1	5.482	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	387	97	897	1032	0.375	389	303	1.1	0.6	5.619	A
2 - Copthorne Way (E)	1047	262	230	1700	0.616	1053	1056	3.3	1.6	5.623	A
3 - Copthorne Way (W)	1112	278	85	2032	0.547	1115	1199	2.1	1.2	3.940	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	324	81	750	1120	0.290	325	253	0.6	0.4	4.534	A
2 - Copthorne Way (E)	877	219	192	1725	0.508	879	883	1.6	1.0	4.266	A
3 - Copthorne Way (W)	931	233	71	2043	0.456	933	1000	1.2	0.8	3.248	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.40	0.00	0.00	0.40	0.40			N/A	N/A
2 - Copthorne Way (E)	1.02	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Way (W)	0.83	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.59	0.08	0.78	1.36	1.43			N/A	N/A
2 - Copthorne Way (E)	1.58	0.05	0.50	3.99	6.23			N/A	N/A
3 - Copthorne Way (W)	1.20	0.05	0.65	2.72	3.92			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	1.06	0.03	0.26	1.06	1.06			N/A	N/A
2 - Copthorne Way (E)	3.20	0.03	0.29	3.20	11.35			N/A	N/A
3 - Copthorne Way (W)	2.04	0.03	0.27	2.04	2.04			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	1.07	0.03	0.28	1.07	3.16			N/A	N/A
2 - Copthorne Way (E)	3.26	0.03	0.27	3.26	3.48			N/A	N/A
3 - Copthorne Way (W)	2.06	0.03	0.26	2.06	2.06			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.61	0.09	0.80	1.36	1.43			N/A	N/A
2 - Copthorne Way (E)	1.63	0.06	0.92	3.82	5.51			N/A	N/A
3 - Copthorne Way (W)	1.22	0.15	1.11	1.88	2.42			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.41	0.03	0.34	1.11	1.31			N/A	N/A
2 - Copthorne Way (E)	1.04	0.04	0.41	2.59	4.19			N/A	N/A
3 - Copthorne Way (W)	0.84	0.06	0.73	1.46	1.89			N/A	N/A

2029 + Committed Development + Development (350 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Copthorne Way (W) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Copthorne Way Roundabout	Standard Roundabout		1, 2, 3	10.05	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.05	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	Relationship type	Relationship
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Worsell Drive		ONE HOUR	✓	377	100.000
2 - Copthorne Way (E)		ONE HOUR	✓	1344	100.000
3 - Copthorne Way (W)		ONE HOUR	✓	1457	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	1	107	269
	2 - Copthorne Way (E)	165	5	1174
	3 - Copthorne Way (W)	314	1142	1

Vehicle Mix

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

Heavy Vehicle %

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	2	1
	2 - Copthorne Way (E)	1	0	2
	3 - Copthorne Way (W)	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Worsell Drive	0.48	7.96	0.9	3.5	A	346	519
2 - Copthorne Way (E)	0.84	12.33	4.9	23.8	B	1233	1849
3 - Copthorne Way (W)	0.79	8.49	3.7	12.8	A	1337	2006

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	284	71	861	1107	0.256	283	360	0.0	0.3	4.358	A
2 - Copthorne Way (E)	1012	253	203	1833	0.552	1007	941	0.0	1.2	4.334	A
3 - Copthorne Way (W)	1097	274	128	2070	0.530	1093	1082	0.0	1.1	3.666	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	339	85	1031	1006	0.337	339	430	0.3	0.5	5.385	A
2 - Copthorne Way (E)	1208	302	244	1806	0.669	1205	1126	1.2	2.0	5.959	A
3 - Copthorne Way (W)	1310	328	153	2052	0.638	1308	1295	1.1	1.7	4.817	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	415	104	1259	871	0.477	414	525	0.5	0.9	7.852	A
2 - Copthorne Way (E)	1479	370	298	1770	0.836	1468	1375	2.0	4.7	11.549	B
3 - Copthorne Way (W)	1605	401	187	2028	0.791	1597	1579	1.7	3.6	8.203	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	415	104	1264	867	0.479	415	528	0.9	0.9	7.964	A
2 - Copthorne Way (E)	1479	370	299	1769	0.836	1479	1381	4.7	4.9	12.329	B
3 - Copthorne Way (W)	1605	401	188	2027	0.791	1604	1589	3.6	3.7	8.489	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	339	85	1039	1002	0.339	341	434	0.9	0.5	5.458	A
2 - Copthorne Way (E)	1208	302	245	1805	0.669	1219	1134	4.9	2.1	6.266	A
3 - Copthorne Way (W)	1310	328	155	2051	0.639	1318	1309	3.7	1.8	4.961	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	284	71	867	1104	0.257	285	362	0.5	0.3	4.397	A
2 - Copthorne Way (E)	1012	253	205	1832	0.552	1015	947	2.1	1.2	4.426	A
3 - Copthorne Way (W)	1097	274	129	2070	0.530	1100	1091	1.8	1.1	3.720	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.34	0.00	0.00	0.34	0.34			N/A	N/A
2 - Copthorne Way (E)	1.22	0.56	1.07	1.22	1.57			N/A	N/A
3 - Copthorne Way (W)	1.12	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.50	0.50	1.00	1.40	1.45			N/A	N/A
2 - Copthorne Way (E)	1.98	0.05	0.46	5.35	8.80			N/A	N/A
3 - Copthorne Way (W)	1.74	0.05	0.45	4.64	7.61			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.90	0.03	0.26	0.90	0.90			N/A	N/A
2 - Copthorne Way (E)	4.73	0.03	0.32	7.00	23.82			N/A	N/A
3 - Copthorne Way (W)	3.63	0.03	0.29	3.63	12.80			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.91	0.03	0.28	0.96	3.50			N/A	N/A
2 - Copthorne Way (E)	4.91	0.03	0.28	4.91	13.56			N/A	N/A
3 - Copthorne Way (W)	3.71	0.03	0.27	3.71	3.71			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.52	0.05	0.57	1.32	1.41			N/A	N/A
2 - Copthorne Way (E)	2.06	0.05	0.56	5.51	8.65			N/A	N/A
3 - Copthorne Way (W)	1.79	0.06	0.95	4.33	6.27			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.35	0.03	0.27	0.48	0.71			N/A	N/A
2 - Copthorne Way (E)	1.25	0.04	0.36	3.07	6.03			N/A	N/A
3 - Copthorne Way (W)	1.14	0.04	0.41	2.86	4.78			N/A	N/A

2029 + Committed Development + Development (450 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Copthorne Way (W) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Copthorne Way Roundabout	Standard Roundabout		1, 2, 3	7.74	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.74	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	Relationship type	Relationship
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Worsell Drive		ONE HOUR	✓	431	100.000
2 - Copthorne Way (E)		ONE HOUR	✓	1181	100.000
3 - Copthorne Way (W)		ONE HOUR	✓	1242	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	176	255
	2 - Copthorne Way (E)	91	3	1087
	3 - Copthorne Way (W)	245	997	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	1	7
	2 - Copthorne Way (E)	11	0	8
	3 - Copthorne Way (W)	4	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Worsell Drive	0.52	8.27	1.1	3.2	A	395	593
2 - Copthorne Way (E)	0.78	9.82	3.5	13.2	A	1084	1626
3 - Copthorne Way (W)	0.68	5.53	2.1	4.0	A	1140	1709

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	324	81	750	1120	0.290	323	252	0.0	0.4	4.507	A
2 - Copthorne Way (E)	889	222	191	1726	0.515	885	882	0.0	1.1	4.260	A
3 - Copthorne Way (W)	935	234	70	2043	0.458	932	1006	0.0	0.8	3.229	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	387	97	898	1031	0.375	387	302	0.4	0.6	5.575	A
2 - Copthorne Way (E)	1062	265	229	1701	0.624	1060	1055	1.1	1.6	5.595	A
3 - Copthorne Way (W)	1117	279	84	2033	0.549	1115	1204	0.8	1.2	3.916	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	474	119	1098	911	0.521	472	369	0.6	1.1	8.170	A
2 - Copthorne Way (E)	1301	325	280	1667	0.780	1294	1291	1.6	3.4	9.470	A
3 - Copthorne Way (W)	1367	342	103	2019	0.677	1364	1470	1.2	2.1	5.471	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	474	119	1101	910	0.521	474	370	1.1	1.1	8.266	A
2 - Copthorne Way (E)	1301	325	281	1666	0.781	1300	1294	3.4	3.5	9.820	A
3 - Copthorne Way (W)	1367	342	104	2018	0.678	1367	1478	2.1	2.1	5.528	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	387	97	902	1029	0.376	389	303	1.1	0.6	5.644	A
2 - Copthorne Way (E)	1062	265	230	1700	0.625	1069	1060	3.5	1.7	5.771	A
3 - Copthorne Way (W)	1117	279	85	2032	0.549	1120	1214	2.1	1.2	3.960	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	324	81	754	1118	0.290	325	253	0.6	0.4	4.549	A
2 - Copthorne Way (E)	889	222	192	1725	0.516	892	887	1.7	1.1	4.335	A
3 - Copthorne Way (W)	935	234	71	2043	0.458	937	1013	1.2	0.8	3.257	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.40	0.00	0.00	0.40	0.40			N/A	N/A
2 - Copthorne Way (E)	1.05	0.55	1.00	1.40	1.45			N/A	N/A
3 - Copthorne Way (W)	0.84	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.60	0.08	0.78	1.36	1.43			N/A	N/A
2 - Copthorne Way (E)	1.64	0.05	0.49	4.22	6.62			N/A	N/A
3 - Copthorne Way (W)	1.21	0.05	0.64	2.75	3.97			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	1.07	0.03	0.26	1.07	1.07			N/A	N/A
2 - Copthorne Way (E)	3.39	0.03	0.29	3.39	13.15			N/A	N/A
3 - Copthorne Way (W)	2.06	0.03	0.27	2.06	2.06			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	1.08	0.03	0.28	1.08	3.17			N/A	N/A
2 - Copthorne Way (E)	3.47	0.03	0.27	3.47	4.48			N/A	N/A
3 - Copthorne Way (W)	2.08	0.03	0.26	2.08	2.08			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.61	0.09	0.80	1.36	1.43			N/A	N/A
2 - Copthorne Way (E)	1.69	0.06	0.87	4.06	5.95			N/A	N/A
3 - Copthorne Way (W)	1.23	0.14	1.12	1.91	2.49			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.41	0.03	0.34	1.12	1.31			N/A	N/A
2 - Copthorne Way (E)	1.07	0.04	0.40	2.70	4.53			N/A	N/A
3 - Copthorne Way (W)	0.85	0.06	0.72	1.50	1.91			N/A	N/A

2029 + Committed Development + Development (450 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	3 - Copthorne Way (W) - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Copthorne Way Roundabout	Standard Roundabout		1, 2, 3	10.33	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.33	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	Relationship type	Relationship
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Worsell Drive		ONE HOUR	✓	377	100.000
2 - Copthorne Way (E)		ONE HOUR	✓	1349	100.000
3 - Copthorne Way (W)		ONE HOUR	✓	1472	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	1	107	269
	2 - Copthorne Way (E)	165	5	1180
	3 - Copthorne Way (W)	314	1157	1

Vehicle Mix

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

Heavy Vehicle %

		To		
		1 - Worsell Drive	2 - Copthorne Way (E)	3 - Copthorne Way (W)
From	1 - Worsell Drive	0	2	1
	2 - Copthorne Way (E)	1	0	2
	3 - Copthorne Way (W)	4	2	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Worsell Drive	0.48	8.14	0.9	3.5	A	346	519
2 - Copthorne Way (E)	0.84	12.60	5.0	24.7	B	1238	1857
3 - Copthorne Way (W)	0.80	8.83	3.9	14.4	A	1351	2026

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	284	71	872	1101	0.258	283	359	0.0	0.3	4.394	A
2 - Copthorne Way (E)	1016	254	203	1833	0.554	1011	952	0.0	1.2	4.355	A
3 - Copthorne Way (W)	1108	277	128	2070	0.535	1104	1086	0.0	1.1	3.709	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	339	85	1044	999	0.340	338	430	0.3	0.5	5.448	A
2 - Copthorne Way (E)	1213	303	244	1806	0.672	1210	1139	1.2	2.0	6.011	A
3 - Copthorne Way (W)	1324	331	153	2052	0.645	1321	1300	1.1	1.8	4.904	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	415	104	1275	861	0.482	414	525	0.5	0.9	8.018	A
2 - Copthorne Way (E)	1486	371	298	1770	0.840	1474	1391	2.0	4.8	11.764	B
3 - Copthorne Way (W)	1621	405	187	2028	0.799	1613	1585	1.8	3.8	8.502	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	415	104	1281	857	0.484	415	528	0.9	0.9	8.139	A
2 - Copthorne Way (E)	1486	371	299	1769	0.840	1485	1397	4.8	5.0	12.596	B
3 - Copthorne Way (W)	1621	405	188	2027	0.800	1621	1596	3.8	3.9	8.828	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	339	85	1053	993	0.341	341	434	0.9	0.5	5.529	A
2 - Copthorne Way (E)	1213	303	245	1805	0.672	1225	1148	5.0	2.1	6.329	A
3 - Copthorne Way (W)	1324	331	155	2051	0.645	1332	1315	3.9	1.8	5.059	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Worsell Drive	284	71	878	1097	0.259	285	362	0.5	0.4	4.435	A
2 - Copthorne Way (E)	1016	254	205	1832	0.555	1019	958	2.1	1.3	4.448	A
3 - Copthorne Way (W)	1108	277	129	2070	0.536	1111	1095	1.8	1.2	3.768	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - Copthorne Way (E)	1.23	0.56	1.08	1.25	1.63			N/A	N/A
3 - Copthorne Way (W)	1.14	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.51	0.05	0.54	1.31	1.40			N/A	N/A
2 - Copthorne Way (E)	2.01	0.05	0.46	5.43	8.93			N/A	N/A
3 - Copthorne Way (W)	1.79	0.04	0.45	4.78	7.89			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.92	0.03	0.26	0.92	0.92			N/A	N/A
2 - Copthorne Way (E)	4.85	0.03	0.32	7.56	24.73			N/A	N/A
3 - Copthorne Way (W)	3.80	0.03	0.29	3.80	14.40			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.93	0.03	0.28	0.95	3.55			N/A	N/A
2 - Copthorne Way (E)	5.03	0.03	0.29	5.03	14.61			N/A	N/A
3 - Copthorne Way (W)	3.89	0.03	0.27	3.89	4.11			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.52	0.06	0.61	1.32	1.41			N/A	N/A
2 - Copthorne Way (E)	2.09	0.05	0.54	5.60	8.83			N/A	N/A
3 - Copthorne Way (W)	1.85	0.06	0.91	4.56	6.67			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Worsell Drive	0.35	0.03	0.27	0.49	0.87			N/A	N/A
2 - Copthorne Way (E)	1.26	0.04	0.35	3.09	6.16			N/A	N/A
3 - Copthorne Way (W)	1.16	0.04	0.40	2.93	4.99			N/A	N/A

Junctions 10

ARCADY 10 - Roundabout Module

Version: 10.1.0.1820
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Filename: Dukes Head Roundabout - 2024.j10
Path: T:\Projects\9000 Series Project Numbers\9155ITB Wychwood, Turners Hill Rd, Crawley Down\Tech\Assessments\Arcady\2024
Report generation date: 07/03/2024 15:08:37

»2023 Observed, AM
»2023 Observed, PM
»2029 Future Year, AM
»2029 Future Year, PM
»2029 + Committed Development, AM
»2029 + Committed Development, PM
»2029 + Committed Development + Development (350 Homes), AM
»2029 + Committed Development + Development (350 Homes), PM
»2029 + Committed Development + Development (450 Homes), AM
»2029 + Committed Development + Development (450 Homes), PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
2023 Observed						
1 - Turners Hill Road (N)	0.7	5.30	0.40	0.9	5.87	0.46
2 - A264 Snow Hill	1.6	10.13	0.61	2.4	15.21	0.71
3 - Turners Hill Road (S)	1.2	6.34	0.54	0.6	4.56	0.38
4 - Copthorne Common Road	2.4	6.77	0.71	1.7	4.88	0.63
2029 Future Year						
1 - Turners Hill Road (N)	0.8	5.82	0.44	1.1	6.85	0.52
2 - A264 Snow Hill	2.0	12.19	0.67	4.0	24.19	0.81
3 - Turners Hill Road (S)	1.4	7.26	0.59	0.7	5.05	0.42
4 - Copthorne Common Road	3.1	8.30	0.76	2.2	5.73	0.69
2029 + Committed Development						
1 - Turners Hill Road (N)	0.8	6.16	0.45	1.1	6.99	0.53
2 - A264 Snow Hill	2.2	13.07	0.69	4.6	27.79	0.84
3 - Turners Hill Road (S)	1.5	7.44	0.60	0.8	5.20	0.44
4 - Copthorne Common Road	3.7	9.69	0.79	2.3	5.90	0.70
2029 + Committed Development + Development (350 Homes)						
1 - Turners Hill Road (N)	0.9	6.47	0.47	1.3	7.97	0.57
2 - A264 Snow Hill	2.4	14.13	0.71	7.8	46.81	0.91
3 - Turners Hill Road (S)	2.2	9.54	0.69	0.9	5.57	0.48
4 - Copthorne Common Road	4.3	11.10	0.82	2.8	6.86	0.74
2029 + Committed Development + Development (450 Homes)						
1 - Turners Hill Road (N)	0.9	6.56	0.47	1.4	8.30	0.58
2 - A264 Snow Hill	2.4	14.46	0.72	9.5	56.19	0.93
3 - Turners Hill Road (S)	2.5	10.38	0.72	0.9	5.69	0.49
4 - Copthorne Common Road	4.5	11.58	0.83	2.9	7.20	0.75

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

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

File summary

File Description

Title	
Location	
Site number	
Date	15/02/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\basingstoke.hotdesk
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use 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	Relationship type	Relationship
D1	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓		
D2	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓		
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2
D5	Committed Development	AM	ONE HOUR	07:00	08:30	15			
D6	Committed Development	PM	ONE HOUR	16:30	18:00	15			
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6
D9	Development 350 Homes	AM	ONE HOUR	07:00	08:30	15			
D10	Development 350 Homes	PM	ONE HOUR	16:30	18:00	15			
D11	Development 450 Homes	AM	ONE HOUR	07:00	08:30	15			
D12	Development 450 Homes	PM	ONE HOUR	16:30	18:00	15			
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2023-2029 AM		1.0644
G2	2023-2029 PM		1.0794

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2023 Observed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Copthorne Common Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Dukes Head Roundabout	Standard Roundabout		1, 2, 3, 4	7.09	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.09	A

Arms

Arms

Arm	Name	Description	No give-way line
1	Turners Hill Road (N)		
2	A264 Snow Hill		
3	Turners Hill Road (S)		
4	Copthorne Common Road		

Roundabout Geometry

Arm	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Entry only	Exit only
1 - Turners Hill Road (N)	3.30	6.60	13.0	100.0	70.0	7.0		
2 - A264 Snow Hill	3.50	4.80	18.0	25.0	60.0	32.0		
3 - Turners Hill Road (S)	3.10	6.70	16.0	950.0	70.0	4.0		
4 - Copthorne Common Road	4.50	7.50	32.0	45.0	60.0	23.0		

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Final slope	Final intercept (PCU/hr)
1 - Turners Hill Road (N)	0.540	1736
2 - A264 Snow Hill	0.503	1384
3 - Turners Hill Road (S)	0.553	1791
4 - Copthorne Common Road	0.652	2169

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	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Turners Hill Road (N)		ONE HOUR	✓	415	100.000
2 - A264 Snow Hill		ONE HOUR	✓	511	100.000
3 - Turners Hill Road (S)		ONE HOUR	✓	612	100.000
4 - Copthorne Common Road		ONE HOUR	✓	1153	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	1	18	166	230
	2 - A264 Snow Hill	36	0	24	451
	3 - Turners Hill Road (S)	290	29	0	293
	4 - Copthorne Common Road	342	526	283	2

Vehicle Mix

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

Heavy Vehicle %

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	11	5	7
	2 - A264 Snow Hill	6	0	13	7
	3 - Turners Hill Road (S)	4	17	0	8
	4 - Copthorne Common Road	6	5	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Turners Hill Road (N)	0.40	5.30	0.7	2.9	A	381	571
2 - A264 Snow Hill	0.61	10.13	1.6	2.8	B	469	703
3 - Turners Hill Road (S)	0.54	6.34	1.2	1.7	A	562	842
4 - Copthorne Common Road	0.71	6.77	2.4	4.4	A	1058	1587

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	312	78	630	1294	0.241	311	502	0.0	0.3	3.656	A
2 - A264 Snow Hill	385	96	511	1037	0.371	382	430	0.0	0.6	5.482	A
3 - Turners Hill Road (S)	461	115	539	1382	0.333	459	355	0.0	0.5	3.892	A
4 - Copthorne Common Road	868	217	267	1882	0.461	865	731	0.0	0.9	3.528	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	373	93	754	1228	0.304	373	600	0.3	0.4	4.207	A
2 - A264 Snow Hill	459	115	612	987	0.466	458	514	0.6	0.9	6.801	A
3 - Turners Hill Road (S)	550	138	646	1323	0.416	549	425	0.5	0.7	4.650	A
4 - Copthorne Common Road	1037	259	320	1847	0.561	1035	876	0.9	1.3	4.421	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	457	114	922	1138	0.402	456	734	0.4	0.7	5.273	A
2 - A264 Snow Hill	563	141	749	918	0.613	560	629	0.9	1.5	9.964	A
3 - Turners Hill Road (S)	674	168	790	1243	0.542	672	519	0.7	1.2	6.285	A
4 - Copthorne Common Road	1269	317	391	1801	0.705	1265	1071	1.3	2.3	6.664	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	457	114	925	1136	0.402	457	737	0.7	0.7	5.298	A
2 - A264 Snow Hill	563	141	751	918	0.613	563	631	1.5	1.6	10.133	B
3 - Turners Hill Road (S)	674	168	793	1241	0.543	674	521	1.2	1.2	6.343	A
4 - Copthorne Common Road	1269	317	392	1800	0.705	1269	1074	2.3	2.4	6.774	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	373	93	758	1226	0.304	374	604	0.7	0.4	4.232	A
2 - A264 Snow Hill	459	115	615	985	0.466	462	517	1.6	0.9	6.919	A
3 - Turners Hill Road (S)	550	138	650	1320	0.417	552	427	1.2	0.7	4.698	A
4 - Copthorne Common Road	1037	259	321	1846	0.561	1041	881	2.4	1.3	4.493	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	312	78	634	1292	0.242	313	505	0.4	0.3	3.678	A
2 - A264 Snow Hill	385	96	514	1035	0.372	386	432	0.9	0.6	5.555	A
3 - Turners Hill Road (S)	461	115	543	1380	0.334	462	357	0.7	0.5	3.926	A
4 - Copthorne Common Road	868	217	269	1881	0.462	870	736	1.3	0.9	3.566	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.32	0.00	0.00	0.32	0.32			N/A	N/A
2 - A264 Snow Hill	0.58	0.55	1.00	1.40	1.45			N/A	N/A
3 - Turners Hill Road (S)	0.50	0.00	0.00	0.50	0.50			N/A	N/A
4 - Copthorne Common Road	0.85	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.43	0.00	0.00	0.43	0.43			N/A	N/A
2 - A264 Snow Hill	0.86	0.09	0.87	1.16	1.63			N/A	N/A
3 - Turners Hill Road (S)	0.71	0.09	0.82	1.38	1.45			N/A	N/A
4 - Copthorne Common Road	1.26	0.05	0.60	2.93	4.41			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.66	0.03	0.25	0.66	0.66			N/A	N/A
2 - A264 Snow Hill	1.54	0.03	0.27	1.54	2.07			N/A	N/A
3 - Turners Hill Road (S)	1.17	0.03	0.26	1.17	1.17			N/A	N/A
4 - Copthorne Common Road	2.33	0.03	0.27	2.33	3.04			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.67	0.03	0.29	1.17	2.92			N/A	N/A
2 - A264 Snow Hill	1.56	0.03	0.27	1.56	2.79			N/A	N/A
3 - Turners Hill Road (S)	1.18	0.03	0.27	1.18	1.70			N/A	N/A
4 - Copthorne Common Road	2.36	0.03	0.27	2.36	2.36			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.44	0.00	0.00	0.44	0.44			N/A	N/A
2 - A264 Snow Hill	0.89	0.09	0.87	1.33	1.74			N/A	N/A
3 - Turners Hill Road (S)	0.72	0.18	0.92	1.39	1.44			N/A	N/A
4 - Copthorne Common Road	1.29	0.10	1.08	2.36	2.99			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.32	0.00	0.00	0.32	0.32			N/A	N/A
2 - A264 Snow Hill	0.60	0.05	0.46	1.29	1.29			N/A	N/A
3 - Turners Hill Road (S)	0.50	0.05	0.46	1.28	1.39			N/A	N/A
4 - Copthorne Common Road	0.86	0.05	0.53	1.74	2.49			N/A	N/A

2023 Observed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Copthorne Common Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Dukes Head Roundabout	Standard Roundabout		1, 2, 3, 4	7.06	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	7.06	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	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Turners Hill Road (N)		ONE HOUR	✓	482	100.000
2 - A264 Snow Hill		ONE HOUR	✓	520	100.000
3 - Turners Hill Road (S)		ONE HOUR	✓	442	100.000
4 - Copthorne Common Road		ONE HOUR	✓	1153	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	7	183	292
	2 - A264 Snow Hill	13	0	29	478
	3 - Turners Hill Road (S)	135	18	0	289
	4 - Copthorne Common Road	216	406	529	2

Vehicle Mix

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

Heavy Vehicle %

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	14	1	1
	2 - A264 Snow Hill	0	0	0	1
	3 - Turners Hill Road (S)	0	0	0	4
	4 - Copthorne Common Road	2	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Turners Hill Road (N)	0.46	5.87	0.9	2.8	A	442	663
2 - A264 Snow Hill	0.71	15.21	2.4	9.8	C	477	716
3 - Turners Hill Road (S)	0.38	4.56	0.6	2.8	A	406	608
4 - Copthorne Common Road	0.63	4.88	1.7	2.9	A	1058	1587

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	363	91	717	1326	0.274	361	273	0.0	0.4	3.729	A
2 - A264 Snow Hill	391	98	755	988	0.396	389	323	0.0	0.6	5.985	A
3 - Turners Hill Road (S)	333	83	588	1426	0.233	332	556	0.0	0.3	3.288	A
4 - Copthorne Common Road	868	217	124	2045	0.425	865	795	0.0	0.7	3.044	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	433	108	858	1249	0.347	433	327	0.4	0.5	4.408	A
2 - A264 Snow Hill	467	117	903	912	0.512	466	387	0.6	1.0	8.038	A
3 - Turners Hill Road (S)	397	99	704	1362	0.292	397	665	0.3	0.4	3.727	A
4 - Copthorne Common Road	1037	259	149	2029	0.511	1035	952	0.7	1.0	3.617	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	531	133	1049	1145	0.464	529	400	0.5	0.9	5.841	A
2 - A264 Snow Hill	573	143	1105	810	0.707	567	474	1.0	2.3	14.577	B
3 - Turners Hill Road (S)	487	122	859	1278	0.381	486	814	0.4	0.6	4.539	A
4 - Copthorne Common Road	1269	317	182	2008	0.632	1267	1162	1.0	1.7	4.841	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	531	133	1051	1143	0.464	531	401	0.9	0.9	5.875	A
2 - A264 Snow Hill	573	143	1108	808	0.708	572	475	2.3	2.4	15.206	C
3 - Turners Hill Road (S)	487	122	864	1275	0.382	487	816	0.6	0.6	4.565	A
4 - Copthorne Common Road	1269	317	183	2008	0.632	1269	1168	1.7	1.7	4.877	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	433	108	861	1247	0.347	435	328	0.9	0.5	4.436	A
2 - A264 Snow Hill	467	117	907	910	0.513	473	388	2.4	1.1	8.317	A
3 - Turners Hill Road (S)	397	99	711	1358	0.293	398	668	0.6	0.4	3.754	A
4 - Copthorne Common Road	1037	259	150	2029	0.511	1039	960	1.7	1.1	3.649	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	363	91	720	1324	0.274	364	274	0.5	0.4	3.753	A
2 - A264 Snow Hill	391	98	759	986	0.397	393	325	1.1	0.7	6.091	A
3 - Turners Hill Road (S)	333	83	593	1423	0.234	333	559	0.4	0.3	3.305	A
4 - Copthorne Common Road	868	217	125	2044	0.425	869	801	1.1	0.7	3.066	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.37	0.00	0.00	0.37	0.37			N/A	N/A
2 - A264 Snow Hill	0.65	0.55	1.00	1.40	1.45			N/A	N/A
3 - Turners Hill Road (S)	0.30	0.00	0.00	0.30	0.30			N/A	N/A
4 - Copthorne Common Road	0.73	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.53	0.06	0.65	1.33	1.42			N/A	N/A
2 - A264 Snow Hill	1.03	0.07	0.84	1.89	2.62			N/A	N/A
3 - Turners Hill Road (S)	0.41	0.00	0.00	0.41	0.41			N/A	N/A
4 - Copthorne Common Road	1.04	0.06	0.75	1.99	2.85			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.85	0.03	0.26	0.85	0.85			N/A	N/A
2 - A264 Snow Hill	2.29	0.03	0.29	2.29	9.76			N/A	N/A
3 - Turners Hill Road (S)	0.61	0.03	0.25	0.61	0.61			N/A	N/A
4 - Copthorne Common Road	1.70	0.03	0.26	1.70	1.70			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.86	0.03	0.28	0.86	2.83			N/A	N/A
2 - A264 Snow Hill	2.36	0.03	0.28	2.36	7.18			N/A	N/A
3 - Turners Hill Road (S)	0.61	0.03	0.29	1.29	2.83			N/A	N/A
4 - Copthorne Common Road	1.71	0.03	0.26	1.71	1.71			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.54	0.54	1.00	1.40	1.45			N/A	N/A
2 - A264 Snow Hill	1.07	0.06	0.69	2.25	3.19			N/A	N/A
3 - Turners Hill Road (S)	0.42	0.00	0.00	0.42	0.42			N/A	N/A
4 - Copthorne Common Road	1.05	0.24	1.05	1.43	1.75			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.38	0.03	0.26	0.47	0.50			N/A	N/A
2 - A264 Snow Hill	0.67	0.04	0.38	1.50	2.44			N/A	N/A
3 - Turners Hill Road (S)	0.31	0.00	0.00	0.31	0.31			N/A	N/A
4 - Copthorne Common Road	0.74	0.07	0.77	1.25	1.25			N/A	N/A

2029 Future Year, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Copthorne Common Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Dukes Head Roundabout	Standard Roundabout		1, 2, 3, 4	8.43	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	8.43	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	Relationship type	Relationship
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Turners Hill Road (N)		ONE HOUR	✓	442	100.000
2 - A264 Snow Hill		ONE HOUR	✓	544	100.000
3 - Turners Hill Road (S)		ONE HOUR	✓	651	100.000
4 - Copthorne Common Road		ONE HOUR	✓	1227	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	1	19	177	245
	2 - A264 Snow Hill	38	0	26	480
	3 - Turners Hill Road (S)	309	31	0	312
	4 - Copthorne Common Road	364	560	301	2

Vehicle Mix

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

Heavy Vehicle %

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	11	5	7
	2 - A264 Snow Hill	6	0	13	7
	3 - Turners Hill Road (S)	4	17	0	8
	4 - Copthorne Common Road	6	5	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Turners Hill Road (N)	0.44	5.82	0.8	2.9	A	405	608
2 - A264 Snow Hill	0.67	12.19	2.0	5.9	B	499	749
3 - Turners Hill Road (S)	0.59	7.26	1.4	1.6	A	598	897
4 - Copthorne Common Road	0.76	8.30	3.1	8.8	A	1126	1689

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	333	83	670	1273	0.261	331	534	0.0	0.4	3.818	A
2 - A264 Snow Hill	409	102	544	1020	0.401	407	457	0.0	0.7	5.843	A
3 - Turners Hill Road (S)	490	123	574	1363	0.360	488	377	0.0	0.6	4.107	A
4 - Copthorne Common Road	924	231	284	1871	0.494	920	778	0.0	1.0	3.772	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	397	99	802	1202	0.330	397	639	0.4	0.5	4.466	A
2 - A264 Snow Hill	489	122	652	967	0.506	488	547	0.7	1.0	7.489	A
3 - Turners Hill Road (S)	586	146	687	1300	0.451	585	452	0.6	0.8	5.027	A
4 - Copthorne Common Road	1103	276	340	1834	0.602	1101	932	1.0	1.5	4.898	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	486	122	980	1107	0.439	485	781	0.5	0.8	5.782	A
2 - A264 Snow Hill	599	150	797	895	0.669	595	669	1.0	1.9	11.864	B
3 - Turners Hill Road (S)	717	179	840	1215	0.590	715	552	0.8	1.4	7.160	A
4 - Copthorne Common Road	1351	338	416	1785	0.757	1345	1139	1.5	3.0	8.074	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	486	122	984	1104	0.440	486	784	0.8	0.8	5.824	A
2 - A264 Snow Hill	599	150	799	893	0.670	599	671	1.9	2.0	12.194	B
3 - Turners Hill Road (S)	717	179	844	1213	0.591	717	554	1.4	1.4	7.257	A
4 - Copthorne Common Road	1351	338	417	1784	0.757	1351	1144	3.0	3.1	8.302	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	397	99	808	1199	0.331	398	643	0.8	0.5	4.502	A
2 - A264 Snow Hill	489	122	655	965	0.507	493	551	2.0	1.0	7.680	A
3 - Turners Hill Road (S)	586	146	693	1296	0.452	588	455	1.4	0.8	5.100	A
4 - Copthorne Common Road	1103	276	342	1833	0.602	1109	939	3.1	1.5	5.017	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	333	83	675	1270	0.262	333	537	0.5	0.4	3.842	A
2 - A264 Snow Hill	409	102	548	1019	0.402	411	460	1.0	0.7	5.939	A
3 - Turners Hill Road (S)	490	123	579	1360	0.361	491	380	0.8	0.6	4.149	A
4 - Copthorne Common Road	924	231	286	1869	0.494	926	784	1.5	1.0	3.827	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.35	0.00	0.00	0.35	0.35			N/A	N/A
2 - A264 Snow Hill	0.66	0.55	1.00	1.40	1.45			N/A	N/A
3 - Turners Hill Road (S)	0.56	0.55	1.00	1.40	1.45			N/A	N/A
4 - Copthorne Common Road	0.97	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.49	0.00	0.00	0.49	0.49			N/A	N/A
2 - A264 Snow Hill	1.01	0.08	0.88	1.76	2.27			N/A	N/A
3 - Turners Hill Road (S)	0.81	0.08	0.82	1.50	1.53			N/A	N/A
4 - Copthorne Common Road	1.49	0.05	0.48	3.78	5.88			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.78	0.03	0.26	0.78	0.78			N/A	N/A
2 - A264 Snow Hill	1.95	0.03	0.28	1.95	5.91			N/A	N/A
3 - Turners Hill Road (S)	1.41	0.03	0.26	1.41	1.41			N/A	N/A
4 - Copthorne Common Road	3.01	0.03	0.28	3.01	8.76			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.78	0.03	0.28	0.84	2.95			N/A	N/A
2 - A264 Snow Hill	1.99	0.03	0.28	1.99	4.16			N/A	N/A
3 - Turners Hill Road (S)	1.43	0.03	0.27	1.43	1.61			N/A	N/A
4 - Copthorne Common Road	3.06	0.03	0.27	3.06	3.06			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.50	0.00	0.00	0.50	0.50			N/A	N/A
2 - A264 Snow Hill	1.04	0.07	0.84	1.92	2.67			N/A	N/A
3 - Turners Hill Road (S)	0.83	0.13	0.91	1.11	1.11			N/A	N/A
4 - Copthorne Common Road	1.53	0.07	0.99	3.40	4.75			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - A264 Snow Hill	0.68	0.04	0.42	1.39	1.98			N/A	N/A
3 - Turners Hill Road (S)	0.57	0.05	0.50	1.33	1.43			N/A	N/A
4 - Copthorne Common Road	0.99	0.04	0.43	2.36	3.71			N/A	N/A

2029 Future Year, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Copthorne Common Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Dukes Head Roundabout	Standard Roundabout		1, 2, 3, 4	9.49	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.49	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	Relationship type	Relationship
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Turners Hill Road (N)		ONE HOUR	✓	520	100.000
2 - A264 Snow Hill		ONE HOUR	✓	561	100.000
3 - Turners Hill Road (S)		ONE HOUR	✓	477	100.000
4 - Copthorne Common Road		ONE HOUR	✓	1245	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	8	198	315
	2 - A264 Snow Hill	14	0	31	516
	3 - Turners Hill Road (S)	146	19	0	312
	4 - Copthorne Common Road	233	438	571	2

Vehicle Mix

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

Heavy Vehicle %

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	14	1	1
	2 - A264 Snow Hill	0	0	0	1
	3 - Turners Hill Road (S)	0	0	0	4
	4 - Copthorne Common Road	2	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Turners Hill Road (N)	0.52	6.85	1.1	2.5	A	477	716
2 - A264 Snow Hill	0.81	24.19	4.0	20.2	C	515	773
3 - Turners Hill Road (S)	0.42	5.05	0.7	2.9	A	438	657
4 - Copthorne Common Road	0.69	5.73	2.2	4.2	A	1142	1713

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	392	98	773	1295	0.303	390	295	0.0	0.4	3.971	A
2 - A264 Snow Hill	423	106	814	958	0.441	419	349	0.0	0.8	6.652	A
3 - Turners Hill Road (S)	359	90	634	1400	0.257	358	600	0.0	0.3	3.448	A
4 - Copthorne Common Road	937	234	134	2038	0.460	934	857	0.0	0.8	3.249	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	468	117	925	1212	0.386	467	353	0.4	0.6	4.827	A
2 - A264 Snow Hill	505	126	975	876	0.576	502	418	0.8	1.3	9.581	A
3 - Turners Hill Road (S)	429	107	759	1332	0.322	428	718	0.3	0.5	3.982	A
4 - Copthorne Common Road	1119	280	161	2022	0.553	1117	1027	0.8	1.2	3.975	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	573	143	1132	1100	0.521	571	431	0.6	1.1	6.788	A
2 - A264 Snow Hill	618	154	1192	765	0.808	608	511	1.3	3.7	21.734	C
3 - Turners Hill Road (S)	525	131	923	1243	0.423	524	878	0.5	0.7	5.000	A
4 - Copthorne Common Road	1370	343	197	1999	0.686	1367	1250	1.2	2.1	5.663	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	573	143	1135	1098	0.522	573	433	1.1	1.1	6.854	A
2 - A264 Snow Hill	618	154	1195	764	0.809	617	512	3.7	4.0	24.195	C
3 - Turners Hill Road (S)	525	131	932	1238	0.424	525	881	0.7	0.7	5.049	A
4 - Copthorne Common Road	1370	343	197	1998	0.686	1370	1260	2.1	2.2	5.729	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	468	117	930	1210	0.387	469	354	1.1	0.6	4.874	A
2 - A264 Snow Hill	505	126	980	873	0.578	515	420	4.0	1.4	10.313	B
3 - Turners Hill Road (S)	429	107	772	1325	0.324	430	722	0.7	0.5	4.026	A
4 - Copthorne Common Road	1119	280	162	2021	0.554	1122	1041	2.2	1.3	4.023	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	392	98	777	1293	0.303	392	296	0.6	0.4	4.004	A
2 - A264 Snow Hill	423	106	819	955	0.442	425	351	1.4	0.8	6.820	A
3 - Turners Hill Road (S)	359	90	641	1397	0.257	360	603	0.5	0.3	3.475	A
4 - Copthorne Common Road	937	234	135	2038	0.460	939	865	1.3	0.9	3.281	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.43	0.00	0.00	0.43	0.43			N/A	N/A
2 - A264 Snow Hill	0.78	0.55	1.00	1.40	1.45			N/A	N/A
3 - Turners Hill Road (S)	0.34	0.00	0.00	0.34	0.34			N/A	N/A
4 - Copthorne Common Road	0.84	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.62	0.09	0.79	1.36	1.43			N/A	N/A
2 - A264 Snow Hill	1.33	0.06	0.74	2.99	4.41			N/A	N/A
3 - Turners Hill Road (S)	0.47	0.00	0.00	0.47	0.47			N/A	N/A
4 - Copthorne Common Road	1.23	0.05	0.61	2.83	4.17			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	1.07	0.03	0.26	1.07	1.07			N/A	N/A
2 - A264 Snow Hill	3.73	0.04	0.36	8.72	20.16			N/A	N/A
3 - Turners Hill Road (S)	0.72	0.03	0.25	0.72	0.72			N/A	N/A
4 - Copthorne Common Road	2.14	0.03	0.27	2.14	2.14			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	1.08	0.03	0.27	1.08	2.53			N/A	N/A
2 - A264 Snow Hill	3.97	0.03	0.31	4.88	18.99			N/A	N/A
3 - Turners Hill Road (S)	0.73	0.03	0.28	0.94	2.91			N/A	N/A
4 - Copthorne Common Road	2.16	0.03	0.26	2.16	2.16			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.64	0.12	0.87	1.37	1.44			N/A	N/A
2 - A264 Snow Hill	1.40	0.04	0.44	3.63	5.87			N/A	N/A
3 - Turners Hill Road (S)	0.48	0.00	0.00	0.48	0.48			N/A	N/A
4 - Copthorne Common Road	1.25	0.13	1.12	1.97	2.64			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.44	0.04	0.36	1.17	1.34			N/A	N/A
2 - A264 Snow Hill	0.80	0.03	0.32	1.75	3.87			N/A	N/A
3 - Turners Hill Road (S)	0.35	0.00	0.00	0.35	0.35			N/A	N/A
4 - Copthorne Common Road	0.86	0.06	0.69	1.57	1.99			N/A	N/A

2029 + Committed Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Copthorne Common Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Dukes Head Roundabout	Standard Roundabout		1, 2, 3, 4	9.31	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	9.31	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	Relationship type	Relationship
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Turners Hill Road (N)		ONE HOUR	✓	442	100.000
2 - A264 Snow Hill		ONE HOUR	✓	560	100.000
3 - Turners Hill Road (S)		ONE HOUR	✓	654	100.000
4 - Copthorne Common Road		ONE HOUR	✓	1288	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	1	19	177	245
	2 - A264 Snow Hill	38	0	26	496
	3 - Turners Hill Road (S)	309	31	0	315
	4 - Copthorne Common Road	364	613	309	2

Vehicle Mix

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

Heavy Vehicle %

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	11	5	7
	2 - A264 Snow Hill	6	0	13	7
	3 - Turners Hill Road (S)	4	17	0	8
	4 - Copthorne Common Road	6	5	6	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Turners Hill Road (N)	0.45	6.16	0.8	3.0	A	405	608
2 - A264 Snow Hill	0.69	13.07	2.2	7.7	B	514	771
3 - Turners Hill Road (S)	0.60	7.44	1.5	1.7	A	601	901
4 - Copthorne Common Road	0.79	9.69	3.7	14.6	A	1182	1773

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	333	83	716	1250	0.266	331	534	0.0	0.4	3.919	A
2 - A264 Snow Hill	422	105	550	1020	0.413	419	497	0.0	0.7	5.964	A
3 - Turners Hill Road (S)	493	123	586	1357	0.363	490	383	0.0	0.6	4.143	A
4 - Copthorne Common Road	970	242	284	1875	0.517	966	792	0.0	1.1	3.940	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	397	99	857	1174	0.338	397	639	0.4	0.5	4.625	A
2 - A264 Snow Hill	503	126	659	965	0.521	502	595	0.7	1.1	7.739	A
3 - Turners Hill Road (S)	588	147	702	1293	0.455	587	459	0.6	0.8	5.096	A
4 - Copthorne Common Road	1158	290	340	1839	0.630	1156	949	1.1	1.7	5.251	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	486	122	1046	1073	0.453	485	780	0.5	0.8	6.108	A
2 - A264 Snow Hill	616	154	805	893	0.691	612	726	1.1	2.1	12.648	B
3 - Turners Hill Road (S)	721	180	857	1207	0.597	718	561	0.8	1.5	7.328	A
4 - Copthorne Common Road	1418	355	416	1789	0.793	1411	1159	1.7	3.6	9.311	A

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	486	122	1051	1070	0.454	486	784	0.8	0.8	6.163	A
2 - A264 Snow Hill	616	154	808	891	0.692	616	730	2.1	2.2	13.073	B
3 - Turners Hill Road (S)	721	180	861	1204	0.598	720	563	1.5	1.5	7.439	A
4 - Copthorne Common Road	1418	355	417	1788	0.793	1418	1164	3.6	3.7	9.694	A

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	397	99	864	1170	0.339	398	644	0.8	0.5	4.672	A
2 - A264 Snow Hill	503	126	663	963	0.522	508	600	2.2	1.1	7.973	A
3 - Turners Hill Road (S)	588	147	708	1289	0.456	591	462	1.5	0.8	5.173	A
4 - Copthorne Common Road	1158	290	342	1837	0.630	1166	957	3.7	1.7	5.428	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	333	83	721	1247	0.267	333	537	0.5	0.4	3.943	A
2 - A264 Snow Hill	422	105	554	1018	0.414	423	500	1.1	0.7	6.069	A
3 - Turners Hill Road (S)	493	123	591	1354	0.364	494	386	0.8	0.6	4.191	A
4 - Copthorne Common Road	970	242	286	1874	0.518	972	799	1.7	1.1	4.004	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.36	0.00	0.00	0.36	0.36			N/A	N/A
2 - A264 Snow Hill	0.70	0.55	1.00	1.40	1.45			N/A	N/A
3 - Turners Hill Road (S)	0.57	0.55	1.00	1.40	1.45			N/A	N/A
4 - Copthorne Common Road	1.06	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.51	0.51	1.00	1.40	1.45			N/A	N/A
2 - A264 Snow Hill	1.07	0.07	0.88	1.92	2.67			N/A	N/A
3 - Turners Hill Road (S)	0.83	0.08	0.83	1.10	1.61			N/A	N/A
4 - Copthorne Common Road	1.68	0.05	0.46	4.42	7.08			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.82	0.03	0.26	0.82	0.82			N/A	N/A
2 - A264 Snow Hill	2.14	0.03	0.29	2.14	7.72			N/A	N/A
3 - Turners Hill Road (S)	1.45	0.03	0.26	1.45	1.45			N/A	N/A
4 - Copthorne Common Road	3.64	0.03	0.29	3.64	14.59			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.83	0.03	0.28	0.83	2.96			N/A	N/A
2 - A264 Snow Hill	2.19	0.03	0.28	2.19	5.02			N/A	N/A
3 - Turners Hill Road (S)	1.47	0.03	0.27	1.47	1.66			N/A	N/A
4 - Copthorne Common Road	3.74	0.03	0.27	3.74	5.09			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.52	0.52	1.00	1.40	1.45			N/A	N/A
2 - A264 Snow Hill	1.11	0.06	0.80	2.23	3.05			N/A	N/A
3 - Turners Hill Road (S)	0.85	0.13	0.91	1.31	1.31			N/A	N/A
4 - Copthorne Common Road	1.73	0.06	0.85	4.23	6.23			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.37	0.00	0.00	0.37	0.37			N/A	N/A
2 - A264 Snow Hill	0.71	0.04	0.41	1.57	2.41			N/A	N/A
3 - Turners Hill Road (S)	0.58	0.05	0.50	1.34	1.45			N/A	N/A
4 - Copthorne Common Road	1.08	0.04	0.39	2.73	4.69			N/A	N/A

2029 + Committed Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Copthorne Common Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Dukes Head Roundabout	Standard Roundabout		1, 2, 3, 4	10.37	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.37	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	Relationship type	Relationship
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Turners Hill Road (N)		ONE HOUR	✓	520	100.000
2 - A264 Snow Hill		ONE HOUR	✓	576	100.000
3 - Turners Hill Road (S)		ONE HOUR	✓	487	100.000
4 - Copthorne Common Road		ONE HOUR	✓	1262	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	8	198	315
	2 - A264 Snow Hill	14	0	31	531
	3 - Turners Hill Road (S)	146	19	0	322
	4 - Copthorne Common Road	233	448	578	2

Vehicle Mix

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

Heavy Vehicle %

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	14	1	1
	2 - A264 Snow Hill	0	0	0	1
	3 - Turners Hill Road (S)	0	0	0	4
	4 - Copthorne Common Road	2	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Turners Hill Road (N)	0.53	6.99	1.1	2.5	A	477	716
2 - A264 Snow Hill	0.84	27.79	4.6	24.1	D	529	793
3 - Turners Hill Road (S)	0.44	5.20	0.8	2.9	A	447	670
4 - Copthorne Common Road	0.70	5.90	2.3	4.5	A	1158	1736

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	392	98	786	1288	0.304	390	295	0.0	0.4	4.002	A
2 - A264 Snow Hill	434	108	819	955	0.454	431	356	0.0	0.8	6.825	A
3 - Turners Hill Road (S)	367	92	645	1394	0.263	365	605	0.0	0.4	3.495	A
4 - Copthorne Common Road	950	237	134	2039	0.466	946	876	0.0	0.9	3.285	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	468	117	941	1204	0.389	467	353	0.4	0.6	4.881	A
2 - A264 Snow Hill	518	130	981	873	0.594	516	427	0.8	1.4	10.015	B
3 - Turners Hill Road (S)	438	109	772	1325	0.331	437	724	0.4	0.5	4.054	A
4 - Copthorne Common Road	1134	284	161	2022	0.561	1133	1049	0.9	1.3	4.041	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	573	143	1150	1089	0.526	571	431	0.6	1.1	6.917	A
2 - A264 Snow Hill	635	159	1200	761	0.833	623	522	1.4	4.3	24.242	C
3 - Turners Hill Road (S)	536	134	937	1235	0.434	535	885	0.5	0.8	5.138	A
4 - Copthorne Common Road	1389	347	197	1999	0.695	1385	1276	1.3	2.2	5.829	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	573	143	1154	1088	0.527	573	433	1.1	1.1	6.989	A
2 - A264 Snow Hill	635	159	1203	760	0.835	633	523	4.3	4.6	27.786	D
3 - Turners Hill Road (S)	536	134	948	1229	0.436	536	888	0.8	0.8	5.196	A
4 - Copthorne Common Road	1389	347	197	1998	0.695	1389	1287	2.2	2.3	5.904	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	468	117	945	1201	0.389	470	355	1.1	0.6	4.931	A
2 - A264 Snow Hill	518	130	986	870	0.595	531	429	4.6	1.5	10.974	B
3 - Turners Hill Road (S)	438	109	788	1316	0.333	439	728	0.8	0.5	4.109	A
4 - Copthorne Common Road	1134	284	162	2021	0.561	1138	1065	2.3	1.3	4.095	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	392	98	790	1286	0.305	392	296	0.6	0.4	4.035	A
2 - A264 Snow Hill	434	108	824	952	0.456	437	358	1.5	0.8	7.013	A
3 - Turners Hill Road (S)	367	92	652	1390	0.264	367	609	0.5	0.4	3.521	A
4 - Copthorne Common Road	950	237	135	2038	0.466	951	884	1.3	0.9	3.317	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.43	0.00	0.00	0.43	0.43			N/A	N/A
2 - A264 Snow Hill	0.82	0.55	1.00	1.40	1.45			N/A	N/A
3 - Turners Hill Road (S)	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4 - Copthorne Common Road	0.87	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.63	0.09	0.79	1.36	1.43			N/A	N/A
2 - A264 Snow Hill	1.42	0.06	0.71	3.39	4.94			N/A	N/A
3 - Turners Hill Road (S)	0.49	0.00	0.00	0.49	0.49			N/A	N/A
4 - Copthorne Common Road	1.27	0.05	0.58	2.95	4.46			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	1.09	0.03	0.26	1.09	1.09			N/A	N/A
2 - A264 Snow Hill	4.30	0.04	0.39	11.25	23.10			N/A	N/A
3 - Turners Hill Road (S)	0.76	0.03	0.25	0.76	0.76			N/A	N/A
4 - Copthorne Common Road	2.23	0.03	0.27	2.23	2.23			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	1.10	0.03	0.27	1.10	2.55			N/A	N/A
2 - A264 Snow Hill	4.64	0.03	0.33	7.73	24.09			N/A	N/A
3 - Turners Hill Road (S)	0.77	0.03	0.28	0.81	2.88			N/A	N/A
4 - Copthorne Common Road	2.26	0.03	0.26	2.26	2.26			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.64	0.12	0.87	1.37	1.44			N/A	N/A
2 - A264 Snow Hill	1.51	0.04	0.42	3.96	6.72			N/A	N/A
3 - Turners Hill Road (S)	0.50	0.50	1.00	1.40	1.45			N/A	N/A
4 - Copthorne Common Road	1.29	0.12	1.12	2.17	2.82			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.44	0.04	0.37	1.18	1.34			N/A	N/A
2 - A264 Snow Hill	0.85	0.03	0.31	1.69	4.16			N/A	N/A
3 - Turners Hill Road (S)	0.36	0.00	0.00	0.36	0.36			N/A	N/A
4 - Copthorne Common Road	0.88	0.06	0.66	1.67	2.25			N/A	N/A

2029 + Committed Development + Development (350 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Copthorne Common Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Dukes Head Roundabout	Standard Roundabout		1, 2, 3, 4	10.60	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	10.60	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	Relationship type	Relationship
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Turners Hill Road (N)		ONE HOUR	✓	448	100.000
2 - A264 Snow Hill		ONE HOUR	✓	564	100.000
3 - Turners Hill Road (S)		ONE HOUR	✓	761	100.000
4 - Copthorne Common Road		ONE HOUR	✓	1314	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	1	19	183	245
	2 - A264 Snow Hill	38	0	30	496
	3 - Turners Hill Road (S)	328	43	0	390
	4 - Copthorne Common Road	364	613	335	2

Vehicle Mix

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

Heavy Vehicle %

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	11	5	7
	2 - A264 Snow Hill	6	0	11	7
	3 - Turners Hill Road (S)	4	12	0	6
	4 - Copthorne Common Road	6	5	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Turners Hill Road (N)	0.47	6.47	0.9	2.9	A	411	617
2 - A264 Snow Hill	0.71	14.13	2.4	9.4	B	518	776
3 - Turners Hill Road (S)	0.69	9.54	2.2	5.0	A	698	1047
4 - Copthorne Common Road	0.82	11.10	4.3	19.6	B	1206	1808

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	337	84	744	1236	0.273	336	548	0.0	0.4	3.991	A
2 - A264 Snow Hill	425	106	574	1009	0.421	422	506	0.0	0.7	6.104	A
3 - Turners Hill Road (S)	573	143	585	1369	0.419	570	410	0.0	0.7	4.491	A
4 - Copthorne Common Road	989	247	307	1863	0.531	985	848	0.0	1.1	4.081	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	403	101	891	1158	0.348	402	656	0.4	0.5	4.758	A
2 - A264 Snow Hill	507	127	687	952	0.532	506	606	0.7	1.1	8.026	A
3 - Turners Hill Road (S)	684	171	701	1304	0.525	683	491	0.7	1.1	5.780	A
4 - Copthorne Common Road	1181	295	368	1823	0.648	1178	1016	1.1	1.8	5.560	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	494	123	1086	1054	0.468	492	800	0.5	0.9	6.394	A
2 - A264 Snow Hill	621	155	840	877	0.708	616	739	1.1	2.3	13.580	B
3 - Turners Hill Road (S)	838	209	856	1217	0.688	834	600	1.1	2.1	9.277	A
4 - Copthorne Common Road	1447	362	449	1770	0.817	1437	1240	1.8	4.2	10.509	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	494	123	1093	1050	0.470	493	805	0.9	0.9	6.466	A
2 - A264 Snow Hill	621	155	843	875	0.710	621	743	2.3	2.4	14.129	B
3 - Turners Hill Road (S)	838	209	861	1215	0.690	838	603	2.1	2.2	9.537	A
4 - Copthorne Common Road	1447	362	452	1769	0.818	1446	1247	4.2	4.3	11.104	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	403	101	900	1153	0.349	404	662	0.9	0.5	4.815	A
2 - A264 Snow Hill	507	127	692	950	0.534	512	612	2.4	1.2	8.309	A
3 - Turners Hill Road (S)	684	171	709	1300	0.526	688	496	2.2	1.1	5.928	A
4 - Copthorne Common Road	1181	295	371	1821	0.649	1191	1026	4.3	1.9	5.799	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	337	84	750	1233	0.274	338	552	0.5	0.4	4.023	A
2 - A264 Snow Hill	425	106	578	1007	0.422	426	510	1.2	0.7	6.222	A
3 - Turners Hill Road (S)	573	143	591	1366	0.419	574	413	1.1	0.7	4.560	A
4 - Copthorne Common Road	989	247	310	1861	0.532	992	856	1.9	1.1	4.156	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.37	0.00	0.00	0.37	0.37			N/A	N/A
2 - A264 Snow Hill	0.72	0.55	1.00	1.40	1.45			N/A	N/A
3 - Turners Hill Road (S)	0.71	0.55	1.00	1.40	1.45			N/A	N/A
4 - Copthorne Common Road	1.12	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.53	0.06	0.67	1.33	1.42			N/A	N/A
2 - A264 Snow Hill	1.12	0.07	0.88	2.10	2.89			N/A	N/A
3 - Turners Hill Road (S)	1.09	0.06	0.79	2.15	2.97			N/A	N/A
4 - Copthorne Common Road	1.81	0.05	0.46	4.83	7.91			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.87	0.03	0.26	0.87	0.87			N/A	N/A
2 - A264 Snow Hill	2.31	0.03	0.29	2.31	9.45			N/A	N/A
3 - Turners Hill Road (S)	2.14	0.03	0.28	2.14	5.01			N/A	N/A
4 - Copthorne Common Road	4.21	0.03	0.31	4.62	19.56			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.88	0.03	0.28	0.88	2.95			N/A	N/A
2 - A264 Snow Hill	2.38	0.03	0.28	2.38	6.18			N/A	N/A
3 - Turners Hill Road (S)	2.18	0.03	0.27	2.18	2.70			N/A	N/A
4 - Copthorne Common Road	4.34	0.03	0.28	4.34	9.22			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.54	0.54	1.00	1.40	1.45			N/A	N/A
2 - A264 Snow Hill	1.17	0.06	0.75	2.51	3.55			N/A	N/A
3 - Turners Hill Road (S)	1.13	0.08	0.93	1.99	2.77			N/A	N/A
4 - Copthorne Common Road	1.88	0.05	0.70	4.83	7.38			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.38	0.03	0.27	0.48	0.78			N/A	N/A
2 - A264 Snow Hill	0.74	0.04	0.39	1.69	2.70			N/A	N/A
3 - Turners Hill Road (S)	0.73	0.04	0.44	1.50	2.12			N/A	N/A
4 - Copthorne Common Road	1.15	0.04	0.37	2.88	5.35			N/A	N/A

2029 + Committed Development + Development (350 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Copthorne Common Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Dukes Head Roundabout	Standard Roundabout		1, 2, 3, 4	14.62	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	14.62	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	Relationship type	Relationship
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Turners Hill Road (N)		ONE HOUR	✓	538	100.000
2 - A264 Snow Hill		ONE HOUR	✓	588	100.000
3 - Turners Hill Road (S)		ONE HOUR	✓	531	100.000
4 - Copthorne Common Road		ONE HOUR	✓	1330	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	8	215	315
	2 - A264 Snow Hill	14	0	43	531
	3 - Turners Hill Road (S)	154	25	0	353
	4 - Copthorne Common Road	233	448	647	2

Vehicle Mix

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

Heavy Vehicle %

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	14	1	1
	2 - A264 Snow Hill	0	0	0	1
	3 - Turners Hill Road (S)	0	0	0	4
	4 - Copthorne Common Road	2	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Turners Hill Road (N)	0.57	7.97	1.3	2.6	A	493	740
2 - A264 Snow Hill	0.91	46.81	7.8	41.4	E	539	809
3 - Turners Hill Road (S)	0.48	5.57	0.9	2.6	A	487	731
4 - Copthorne Common Road	0.74	6.86	2.8	5.7	A	1221	1831

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	405	101	841	1258	0.322	403	301	0.0	0.5	4.201	A
2 - A264 Snow Hill	442	111	884	922	0.480	439	360	0.0	0.9	7.393	A
3 - Turners Hill Road (S)	400	100	645	1394	0.287	398	678	0.0	0.4	3.609	A
4 - Copthorne Common Road	1001	250	144	2031	0.493	997	899	0.0	1.0	3.469	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	483	121	1007	1168	0.414	482	360	0.5	0.7	5.248	A
2 - A264 Snow Hill	528	132	1058	833	0.634	525	431	0.9	1.7	11.558	B
3 - Turners Hill Road (S)	477	119	772	1325	0.360	477	811	0.4	0.6	4.243	A
4 - Copthorne Common Road	1196	299	172	2013	0.594	1194	1076	1.0	1.4	4.382	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	592	148	1230	1046	0.566	590	440	0.7	1.3	7.851	A
2 - A264 Snow Hill	647	162	1293	714	0.906	627	527	1.7	6.7	35.423	E
3 - Turners Hill Road (S)	585	146	929	1239	0.472	583	990	0.6	0.9	5.479	A
4 - Copthorne Common Road	1464	366	211	1989	0.736	1459	1302	1.4	2.7	6.734	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	592	148	1235	1043	0.567	592	441	1.3	1.3	7.971	A
2 - A264 Snow Hill	647	162	1298	711	0.909	642	529	6.7	7.8	46.808	E
3 - Turners Hill Road (S)	585	146	945	1231	0.475	585	995	0.9	0.9	5.573	A
4 - Copthorne Common Road	1464	366	211	1988	0.736	1464	1318	2.7	2.8	6.864	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	483	121	1012	1164	0.415	486	362	1.3	0.7	5.323	A
2 - A264 Snow Hill	528	132	1065	830	0.636	552	434	7.8	1.8	14.006	B
3 - Turners Hill Road (S)	477	119	799	1310	0.364	479	818	0.9	0.6	4.338	A
4 - Copthorne Common Road	1196	299	174	2012	0.594	1201	1104	2.8	1.5	4.462	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	405	101	846	1255	0.323	406	302	0.7	0.5	4.242	A
2 - A264 Snow Hill	442	111	889	919	0.481	446	362	1.8	0.9	7.660	A
3 - Turners Hill Road (S)	400	100	653	1389	0.288	400	682	0.6	0.4	3.644	A
4 - Copthorne Common Road	1001	250	145	2031	0.493	1003	909	1.5	1.0	3.512	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.47	0.00	0.00	0.47	0.47			N/A	N/A
2 - A264 Snow Hill	0.91	0.55	1.00	1.40	1.45			N/A	N/A
3 - Turners Hill Road (S)	0.40	0.00	0.00	0.40	0.40			N/A	N/A
4 - Copthorne Common Road	0.96	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.70	0.08	0.79	1.38	1.46			N/A	N/A
2 - A264 Snow Hill	1.67	0.05	0.61	4.25	6.51			N/A	N/A
3 - Turners Hill Road (S)	0.56	0.08	0.75	1.35	1.43			N/A	N/A
4 - Copthorne Common Road	1.45	0.05	0.48	3.66	5.68			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	1.28	0.03	0.26	1.28	1.28			N/A	N/A
2 - A264 Snow Hill	6.69	0.06	1.36	19.27	30.81			N/A	N/A
3 - Turners Hill Road (S)	0.88	0.03	0.26	0.88	0.88			N/A	N/A
4 - Copthorne Common Road	2.72	0.03	0.28	2.72	4.95			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	1.30	0.03	0.27	1.30	2.61			N/A	N/A
2 - A264 Snow Hill	7.84	0.05	0.46	21.97	41.36			N/A	N/A
3 - Turners Hill Road (S)	0.90	0.03	0.28	0.90	2.59			N/A	N/A
4 - Copthorne Common Road	2.76	0.03	0.27	2.76	2.76			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.72	0.11	0.85	1.38	1.45			N/A	N/A
2 - A264 Snow Hill	1.81	0.04	0.38	4.76	8.98			N/A	N/A
3 - Turners Hill Road (S)	0.58	0.55	1.00	1.40	1.45			N/A	N/A
4 - Copthorne Common Road	1.48	0.09	1.10	2.95	3.99			N/A	N/A

17:45 - 18:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.48	0.04	0.42	1.25	1.38			N/A	N/A
2 - A264 Snow Hill	0.94	0.03	0.29	1.04	4.38			N/A	N/A
3 - Turners Hill Road (S)	0.41	0.03	0.28	0.57	1.03			N/A	N/A
4 - Copthorne Common Road	0.98	0.05	0.48	2.15	3.22			N/A	N/A

2029 + Committed Development + Development (450 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Copthorne Common Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Dukes Head Roundabout	Standard Roundabout		1, 2, 3, 4	11.08	B

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	11.08	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	Relationship type	Relationship
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Turners Hill Road (N)		ONE HOUR	✓	450	100.000
2 - A264 Snow Hill		ONE HOUR	✓	565	100.000
3 - Turners Hill Road (S)		ONE HOUR	✓	791	100.000
4 - Copthorne Common Road		ONE HOUR	✓	1321	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	1	19	185	245
	2 - A264 Snow Hill	38	0	31	496
	3 - Turners Hill Road (S)	333	47	0	411
	4 - Copthorne Common Road	364	613	342	2

Vehicle Mix

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

Heavy Vehicle %

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	11	5	7
	2 - A264 Snow Hill	6	0	11	7
	3 - Turners Hill Road (S)	4	11	0	6
	4 - Copthorne Common Road	6	5	5	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Turners Hill Road (N)	0.47	6.56	0.9	2.9	A	413	620
2 - A264 Snow Hill	0.72	14.46	2.4	10.0	B	519	778
3 - Turners Hill Road (S)	0.72	10.38	2.5	7.5	B	726	1089
4 - Copthorne Common Road	0.83	11.58	4.5	21.1	B	1212	1818

Main Results for each time segment

07:00 - 07:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	339	85	752	1233	0.275	337	552	0.0	0.4	4.015	A
2 - A264 Snow Hill	426	106	581	1006	0.423	423	509	0.0	0.7	6.144	A
3 - Turners Hill Road (S)	596	149	585	1372	0.434	593	418	0.0	0.8	4.605	A
4 - Copthorne Common Road	995	249	314	1859	0.535	990	864	0.0	1.1	4.122	A

07:15 - 07:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	405	101	900	1154	0.351	404	661	0.4	0.5	4.798	A
2 - A264 Snow Hill	508	127	696	949	0.536	507	609	0.7	1.1	8.110	A
3 - Turners Hill Road (S)	711	178	701	1307	0.544	710	501	0.8	1.2	6.015	A
4 - Copthorne Common Road	1188	297	376	1819	0.653	1185	1035	1.1	1.8	5.653	A

07:30 - 07:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	496	124	1098	1048	0.473	494	806	0.5	0.9	6.482	A
2 - A264 Snow Hill	622	156	850	872	0.714	617	742	1.1	2.4	13.869	B
3 - Turners Hill Road (S)	871	218	856	1220	0.714	866	611	1.2	2.4	10.042	B
4 - Copthorne Common Road	1455	364	459	1765	0.824	1444	1263	1.8	4.4	10.904	B

07:45 - 08:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	496	124	1105	1044	0.475	496	811	0.9	0.9	6.558	A
2 - A264 Snow Hill	622	156	853	870	0.715	622	747	2.4	2.4	14.462	B
3 - Turners Hill Road (S)	871	218	861	1217	0.716	871	614	2.4	2.5	10.384	B
4 - Copthorne Common Road	1455	364	462	1763	0.825	1454	1271	4.4	4.5	11.583	B

08:00 - 08:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	405	101	910	1148	0.352	406	668	0.9	0.5	4.858	A
2 - A264 Snow Hill	508	127	701	946	0.537	513	615	2.4	1.2	8.412	A
3 - Turners Hill Road (S)	711	178	709	1302	0.546	716	505	2.5	1.2	6.193	A
4 - Copthorne Common Road	1188	297	380	1816	0.654	1198	1046	4.5	1.9	5.921	A

08:15 - 08:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	339	85	758	1230	0.276	340	556	0.5	0.4	4.047	A
2 - A264 Snow Hill	426	106	585	1004	0.424	427	513	1.2	0.7	6.267	A
3 - Turners Hill Road (S)	596	149	591	1368	0.435	598	421	1.2	0.8	4.680	A
4 - Copthorne Common Road	995	249	317	1857	0.536	998	872	1.9	1.2	4.204	A

Queue Variation Results for each time segment

07:00 - 07:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.38	0.00	0.00	0.38	0.38			N/A	N/A
2 - A264 Snow Hill	0.73	0.55	1.00	1.40	1.45			N/A	N/A
3 - Turners Hill Road (S)	0.76	0.55	1.00	1.40	1.45			N/A	N/A
4 - Copthorne Common Road	1.14	0.55	1.00	1.40	1.45			N/A	N/A

07:15 - 07:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.54	0.07	0.69	1.34	1.42			N/A	N/A
2 - A264 Snow Hill	1.13	0.07	0.87	2.17	2.95			N/A	N/A
3 - Turners Hill Road (S)	1.18	0.06	0.75	2.56	3.62			N/A	N/A
4 - Copthorne Common Road	1.85	0.05	0.45	4.94	8.15			N/A	N/A

07:30 - 07:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.88	0.03	0.26	0.88	0.88			N/A	N/A
2 - A264 Snow Hill	2.37	0.03	0.29	2.37	9.95			N/A	N/A
3 - Turners Hill Road (S)	2.41	0.03	0.28	2.41	7.47			N/A	N/A
4 - Copthorne Common Road	4.39	0.03	0.31	5.46	21.08			N/A	N/A

07:45 - 08:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.90	0.03	0.28	0.90	2.94			N/A	N/A
2 - A264 Snow Hill	2.44	0.03	0.28	2.44	6.57			N/A	N/A
3 - Turners Hill Road (S)	2.47	0.03	0.27	2.47	3.65			N/A	N/A
4 - Copthorne Common Road	4.55	0.03	0.28	4.55	10.84			N/A	N/A

08:00 - 08:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.55	0.55	1.00	1.40	1.45			N/A	N/A
2 - A264 Snow Hill	1.18	0.06	0.74	2.59	3.68			N/A	N/A
3 - Turners Hill Road (S)	1.22	0.07	0.90	2.50	3.42			N/A	N/A
4 - Copthorne Common Road	1.92	0.05	0.65	4.98	7.72			N/A	N/A

08:15 - 08:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.38	0.03	0.27	0.49	0.93			N/A	N/A
2 - A264 Snow Hill	0.74	0.04	0.39	1.72	2.77			N/A	N/A
3 - Turners Hill Road (S)	0.78	0.04	0.42	1.73	2.67			N/A	N/A
4 - Copthorne Common Road	1.16	0.04	0.36	2.90	5.54			N/A	N/A

2029 + Committed Development + Development (450 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Geometry	4 - Copthorne Common Road - Roundabout Geometry	Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Use circulating lanes	Arm order	Junction Delay (s)	Junction LOS
1	Dukes Head Roundabout	Standard Roundabout		1, 2, 3, 4	16.59	C

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	16.59	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	Relationship type	Relationship
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
1 - Turners Hill Road (N)		ONE HOUR	✓	543	100.000
2 - A264 Snow Hill		ONE HOUR	✓	591	100.000
3 - Turners Hill Road (S)		ONE HOUR	✓	544	100.000
4 - Copthorne Common Road		ONE HOUR	✓	1350	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	8	220	315
	2 - A264 Snow Hill	14	0	46	531
	3 - Turners Hill Road (S)	156	26	0	362
	4 - Copthorne Common Road	233	448	666	2

Vehicle Mix

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

Heavy Vehicle %

		To			
		1 - Turners Hill Road (N)	2 - A264 Snow Hill	3 - Turners Hill Road (S)	4 - Copthorne Common Road
From	1 - Turners Hill Road (N)	0	14	1	1
	2 - A264 Snow Hill	0	0	0	1
	3 - Turners Hill Road (S)	0	0	0	4
	4 - Copthorne Common Road	2	1	3	0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
1 - Turners Hill Road (N)	0.58	8.30	1.4	2.7	A	498	747
2 - A264 Snow Hill	0.93	56.19	9.5	46.9	F	542	813
3 - Turners Hill Road (S)	0.49	5.69	0.9	2.5	A	499	748
4 - Copthorne Common Road	0.75	7.20	2.9	6.3	A	1238	1858

Main Results for each time segment

16:30 - 16:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	409	102	857	1249	0.327	407	302	0.0	0.5	4.263	A
2 - A264 Snow Hill	445	111	902	913	0.487	441	361	0.0	0.9	7.572	A
3 - Turners Hill Road (S)	409	102	645	1394	0.294	408	698	0.0	0.4	3.643	A
4 - Copthorne Common Road	1016	254	147	2029	0.501	1012	905	0.0	1.0	3.526	A

16:45 - 17:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	488	122	1025	1157	0.422	487	362	0.5	0.7	5.361	A
2 - A264 Snow Hill	531	133	1080	822	0.646	528	432	0.9	1.8	12.088	B
3 - Turners Hill Road (S)	489	122	772	1325	0.369	488	836	0.4	0.6	4.298	A
4 - Copthorne Common Road	1213	303	176	2011	0.603	1211	1084	1.0	1.5	4.490	A

17:00 - 17:15

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	598	149	1253	1033	0.578	595	442	0.7	1.3	8.169	A
2 - A264 Snow Hill	650	163	1320	700	0.929	626	528	1.8	7.8	40.031	E
3 - Turners Hill Road (S)	599	150	926	1241	0.482	597	1020	0.6	0.9	5.580	A
4 - Copthorne Common Road	1486	372	215	1986	0.748	1480	1308	1.5	2.9	7.042	A

17:15 - 17:30

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	598	149	1258	1031	0.580	597	444	1.3	1.4	8.303	A
2 - A264 Snow Hill	650	163	1325	698	0.932	644	530	7.8	9.5	56.191	F
3 - Turners Hill Road (S)	599	150	943	1232	0.486	598	1025	0.9	0.9	5.685	A
4 - Copthorne Common Road	1486	372	215	1986	0.748	1486	1326	2.9	2.9	7.196	A

17:30 - 17:45

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	488	122	1032	1154	0.423	490	364	1.4	0.7	5.446	A
2 - A264 Snow Hill	531	133	1087	819	0.649	561	435	9.5	1.9	15.523	C
3 - Turners Hill Road (S)	489	122	805	1307	0.374	490	844	0.9	0.6	4.415	A
4 - Copthorne Common Road	1213	303	177	2010	0.604	1219	1117	2.9	1.5	4.583	A

17:45 - 18:00

Arm	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Throughput (exit side) (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
1 - Turners Hill Road (N)	409	102	862	1246	0.328	410	304	0.7	0.5	4.306	A
2 - A264 Snow Hill	445	111	908	910	0.489	449	363	1.9	1.0	7.869	A
3 - Turners Hill Road (S)	409	102	653	1389	0.295	410	703	0.6	0.4	3.681	A
4 - Copthorne Common Road	1016	254	148	2029	0.501	1018	916	1.5	1.0	3.571	A

Queue Variation Results for each time segment

16:30 - 16:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.48	0.00	0.00	0.48	0.48			N/A	N/A
2 - A264 Snow Hill	0.93	0.54	1.00	1.41	1.47			N/A	N/A
3 - Turners Hill Road (S)	0.41	0.00	0.00	0.41	0.41			N/A	N/A
4 - Copthorne Common Road	0.99	0.55	1.00	1.40	1.45			N/A	N/A

16:45 - 17:00

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.72	0.08	0.79	1.40	1.48			N/A	N/A
2 - A264 Snow Hill	1.76	0.05	0.58	4.55	6.97			N/A	N/A
3 - Turners Hill Road (S)	0.58	0.08	0.78	1.36	1.43			N/A	N/A
4 - Copthorne Common Road	1.50	0.05	0.48	3.84	6.03			N/A	N/A

17:00 - 17:15

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	1.34	0.03	0.26	1.34	1.34			N/A	N/A
2 - A264 Snow Hill	7.78	0.08	1.89	21.80	32.96			N/A	N/A
3 - Turners Hill Road (S)	0.92	0.03	0.26	0.92	0.92			N/A	N/A
4 - Copthorne Common Road	2.88	0.03	0.28	2.88	6.34			N/A	N/A

17:15 - 17:30

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	1.36	0.03	0.27	1.36	2.69			N/A	N/A
2 - A264 Snow Hill	9.49	0.06	1.13	27.68	46.88			N/A	N/A
3 - Turners Hill Road (S)	0.94	0.03	0.27	0.94	2.47			N/A	N/A
4 - Copthorne Common Road	2.93	0.03	0.27	2.93	2.93			N/A	N/A

17:30 - 17:45

Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.74	0.10	0.85	1.40	1.46			N/A	N/A
2 - A264 Snow Hill	1.92	0.04	0.37	4.96	9.75			N/A	N/A
3 - Turners Hill Road (S)	0.60	0.55	1.00	1.40	1.45			N/A	N/A
4 - Copthorne Common Road	1.54	0.08	1.08	3.26	4.49			N/A	N/A

17:45 - 18:00

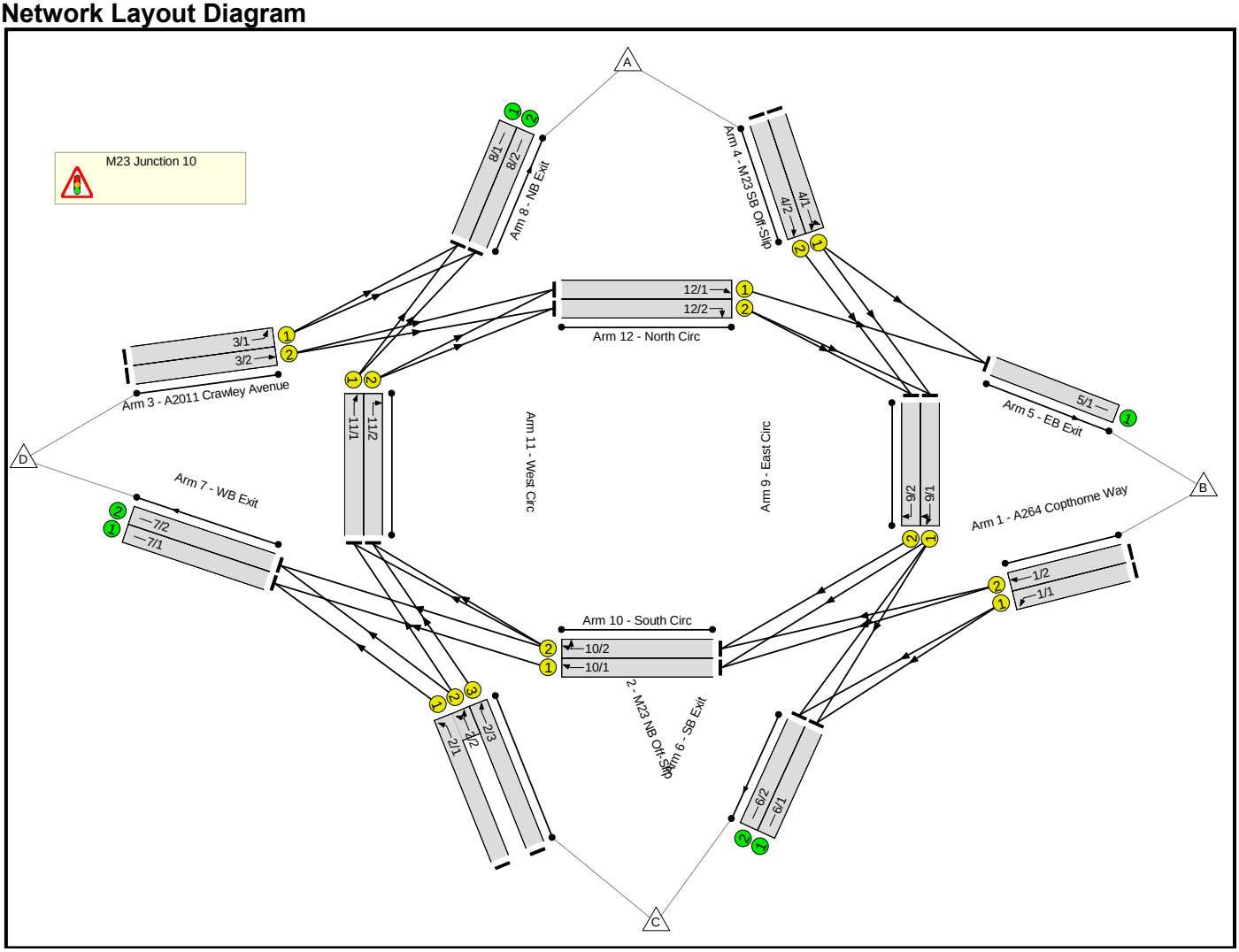
Arm	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
1 - Turners Hill Road (N)	0.49	0.04	0.42	1.27	1.39			N/A	N/A
2 - A264 Snow Hill	0.97	0.03	0.29	1.37	4.26			N/A	N/A
3 - Turners Hill Road (S)	0.42	0.03	0.30	0.92	1.21			N/A	N/A
4 - Copthorne Common Road	1.01	0.05	0.46	2.34	3.56			N/A	N/A

Full Input Data And Results

User and Project Details

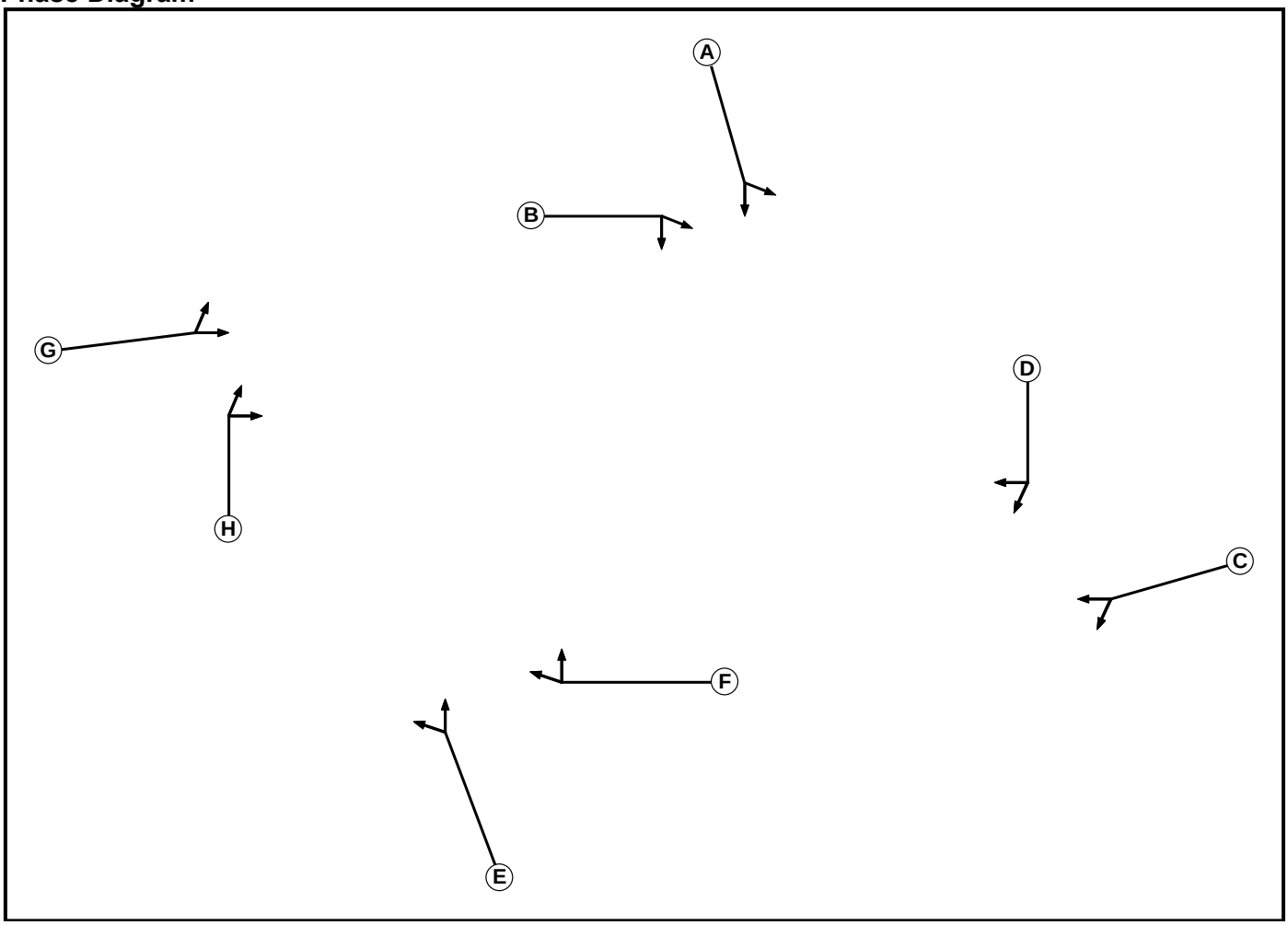
Project:	**Turners Hill, Crawley Down**
Title:	**M23 Junction 10**
Location:	
Client:	Wates
Date Started:	12.02.2024
Model Assumptions:	Existing Layout
Additional detail:	
File name:	M23 Junction 10 - Existing Layout.lsg3x
Author:	Jon Wilkinson
Company:	i-Transport
Address:	Manchester

Network Layout Diagram



Full Input Data And Results

Phase Diagram



Phase Input Data

Phase Name	Phase Type	Stage Stream	Assoc. Phase	Street Min	Cont Min
A	Traffic	1		7	7
B	Traffic	1		7	7
C	Traffic	2		7	7
D	Traffic	2		7	7
E	Traffic	3		7	7
F	Traffic	3		7	7
G	Traffic	4		7	7
H	Traffic	4		7	7

Full Input Data And Results

Phase Intergreens Matrix

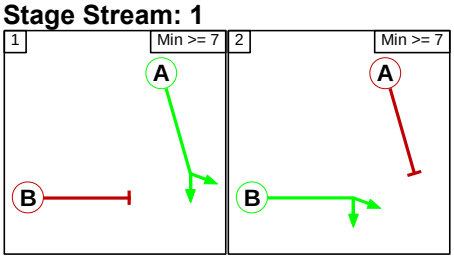
Terminating Phase	Starting Phase								
		A	B	C	D	E	F	G	H
	A		7	-	-	-	-	-	-
	B	7		-	-	-	-	-	-
	C	-	-		7	-	-	-	-
	D	-	-	7		-	-	-	-
	E	-	-	-	-		7	-	-
	F	-	-	-	-	7		-	-
	G	-	-	-	-	-	-		7
	H	-	-	-	-	-	-	7	

Phases in Stage

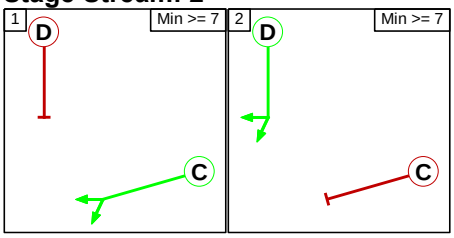
Stream	Stage No.	Phases in Stage
1	1	A
1	2	B
2	1	C
2	2	D
3	1	E
3	2	F
4	1	G
4	2	H

Stage Diagram

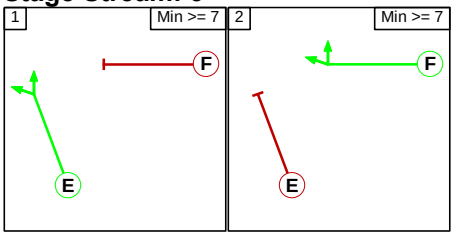
Stage Stream: 1



Stage Stream: 2

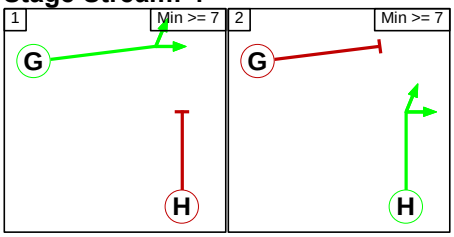


Stage Stream: 3



Full Input Data And Results

Stage Stream: 4



Phase Delays

Stage Stream: 1

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

Stage Stream: 2

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

Stage Stream: 3

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

Stage Stream: 4

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

Prohibited Stage Change

Stage Stream: 1

	To Stage		
		1	2
From Stage	1		7
	2	7	

Stage Stream: 2

	To Stage		
		1	2
From Stage	1		7
	2	7	

Stage Stream: 3

	To Stage		
		1	2
From Stage	1		7
	2	7	

Full Input Data And Results

Stage Stream: 4

	To Stage		
		1	2
From Stage	1		7
	2	7	

Full Input Data And Results

Give-Way Lane Input Data

Junction: M23 Junction 10
There are no Opposed Lanes in this Junction

Full Input Data And Results

Lane Input Data

Full Input Data And Results

Junction: M23 Junction 10												
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 (A264 Copthorne Way)	U	C	2	3	60.0	User	1900	-	-	-	-	-
1/2 (A264 Copthorne Way)	U	C	2	3	60.0	User	1900	-	-	-	-	-
2/1 (M23 NB Off-Slip)	U	E	2	3	60.0	User	1900	-	-	-	-	-
2/2 (M23 NB Off-Slip)	U	E	2	3	2.3	User	1900	-	-	-	-	-
2/3 (M23 NB Off-Slip)	U	E	2	3	60.0	User	1900	-	-	-	-	-
3/1 (A2011 Crawley Avenue)	U	G	2	3	60.0	User	1900	-	-	-	-	-
3/2 (A2011 Crawley Avenue)	U	G	2	3	60.0	User	1900	-	-	-	-	-
4/1 (M23 SB Off-Slip)	U	A	2	3	60.0	User	1900	-	-	-	-	-
4/2 (M23 SB Off-Slip)	U	A	2	3	60.0	User	1900	-	-	-	-	-
5/1 (EB Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/1 (SB Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
6/2 (SB Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/1 (WB Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
7/2 (WB Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/1 (NB Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
8/2 (NB Exit)	U		2	3	60.0	Inf	-	-	-	-	-	-
9/1 (East Circ)	U	D	2	3	12.2	User	1900	-	-	-	-	-
9/2 (East Circ)	U	D	2	3	13.9	User	1900	-	-	-	-	-
10/1 (South Circ)	U	F	2	3	20.9	User	1900	-	-	-	-	-

Full Input Data And Results

10/2 (South Circ)	U	F	2	3	21.7	User	1900	-	-	-	-	-
11/1 (West Circ)	U	H	2	3	13.0	User	1900	-	-	-	-	-
11/2 (West Circ)	U	H	2	3	13.9	User	1900	-	-	-	-	-
12/1 (North Circ)	U	B	2	3	21.7	User	1900	-	-	-	-	-
12/2 (North Circ)	U	B	2	3	22.6	User	1900	-	-	-	-	-

Traffic Flow Groups

Flow Group	Start Time	End Time	Duration	Formula
1: '2023 Survey AM'	07:15	08:15	01:00	
2: '2023 Survey PM'	16:45	17:45	01:00	
3: '2029 Base AM'	07:15	08:15	01:00	
4: '2029 Base PM'	16:45	17:45	01:00	

Scenario 1: '2023 Survey AM' (FG1: '2023 Survey AM', Plan 1: 'Existing')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	413	0	973	1386
	B	375	1	536	237	1149
	C	0	455	5	517	977
	D	683	258	300	0	1241
	Tot.	1058	1127	841	1727	4753

Full Input Data And Results

Traffic Lane Flows

Lane	Scenario 1: 2023 Survey AM
Junction: M23 Junction 10	
1/1	536
1/2	613
2/1 (with short)	517(In) 259(Out)
2/2 (short)	258
2/3	460
3/1	683
3/2	558
4/1	765
4/2	621
5/1	1127
6/1	420
6/2	421
7/1	848
7/2	879
8/1	530
8/2	528
9/1	657
9/2	621
10/1	589
10/2	997
11/1	375
11/2	461
12/1	714
12/2	305

Full Input Data And Results

Lane Saturation Flows

Full Input Data And Results

Junction: M23 Junction 10								
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 (A264 Copthorne Way Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (A264 Copthorne Way Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/1 (M23 NB Off-Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (M23 NB Off-Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (M23 NB Off-Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A2011 Crawley Avenue Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
3/2 (A2011 Crawley Avenue Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
4/1 (M23 SB Off-Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M23 SB Off-Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (EB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (SB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (SB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (WB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (WB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (NB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (NB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (East Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (East Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (South Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
10/2 (South Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
11/1 (West Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
11/2 (West Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
12/1 (North Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
12/2 (North Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900

Full Input Data And Results

Scenario 2: '2023 Survey PM' (FG2: '2023 Survey PM', Plan 1: 'Existing')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	534	0	599	1133
	B	270	0	608	294	1172
	C	0	483	7	277	767
	D	744	147	637	0	1528
	Tot.	1014	1164	1252	1170	4600

Traffic Lane Flows

Lane	Scenario 2: 2023 Survey PM
Junction: M23 Junction 10	
1/1	608
1/2	564
2/1 (with short)	277(In) 139(Out)
2/2 (short)	138
2/3	490
3/1	744
3/2	784
4/1	644
4/2	489
5/1	1164
6/1	625
6/2	627
7/1	531
7/2	639
8/1	507
8/2	507
9/1	754
9/2	489
10/1	392
10/2	771
11/1	270
11/2	490
12/1	630
12/2	644

Full Input Data And Results

Lane Saturation Flows

Full Input Data And Results

Junction: M23 Junction 10								
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 (A264 Copthorne Way Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (A264 Copthorne Way Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/1 (M23 NB Off-Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (M23 NB Off-Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (M23 NB Off-Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A2011 Crawley Avenue Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
3/2 (A2011 Crawley Avenue Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
4/1 (M23 SB Off-Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M23 SB Off-Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (EB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (SB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (SB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (WB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (WB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (NB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (NB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (East Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (East Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (South Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
10/2 (South Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
11/1 (West Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
11/2 (West Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
12/1 (North Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
12/2 (North Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900

Full Input Data And Results

Scenario 3: '2029 Base AM' (FG3: '2029 Base AM', Plan 1: 'Existing')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	440	0	1036	1476
	B	399	1	571	252	1223
	C	0	484	5	550	1039
	D	727	275	319	0	1321
	Tot.	1126	1200	895	1838	5059

Traffic Lane Flows

Lane	Scenario 3: 2029 Base AM
Junction: M23 Junction 10	
1/1	571
1/2	652
2/1 (with short)	550(In) 275(Out)
2/2 (short)	275
2/3	489
3/1	727
3/2	594
4/1	814
4/2	662
5/1	1200
6/1	447
6/2	448
7/1	901
7/2	937
8/1	564
8/2	562
9/1	698
9/2	662
10/1	626
10/2	1062
11/1	399
11/2	490
12/1	760
12/2	324

Full Input Data And Results

Lane Saturation Flows

Full Input Data And Results

Junction: M23 Junction 10								
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 (A264 Copthorne Way Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (A264 Copthorne Way Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/1 (M23 NB Off-Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (M23 NB Off-Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (M23 NB Off-Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A2011 Crawley Avenue Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
3/2 (A2011 Crawley Avenue Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
4/1 (M23 SB Off-Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M23 SB Off-Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (EB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (SB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (SB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (WB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (WB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (NB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (NB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (East Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (East Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (South Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
10/2 (South Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
11/1 (West Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
11/2 (West Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
12/1 (North Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
12/2 (North Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900

Full Input Data And Results

Scenario 4: '2029 Base PM' (FG4: '2029 Base PM', Plan 1: 'Existing')

Traffic Flows, Desired

Desired Flow :

		Destination				
		A	B	C	D	Tot.
Origin	A	0	576	0	647	1223
	B	291	0	656	317	1264
	C	0	521	8	299	828
	D	803	159	688	0	1650
	Tot.	1094	1256	1352	1263	4965

Traffic Lane Flows

Lane	Scenario 4: 2029 Base PM
Junction: M23 Junction 10	
1/1	656
1/2	608
2/1 (with short)	299(In) 150(Out)
2/2 (short)	149
2/3	529
3/1	803
3/2	847
4/1	783
4/2	440
5/1	1256
6/1	676
6/2	676
7/1	672
7/2	591
8/1	548
8/2	546
9/1	903
9/2	440
10/1	522
10/2	733
11/1	291
11/2	529
12/1	680
12/2	696

Full Input Data And Results

Lane Saturation Flows

Full Input Data And Results

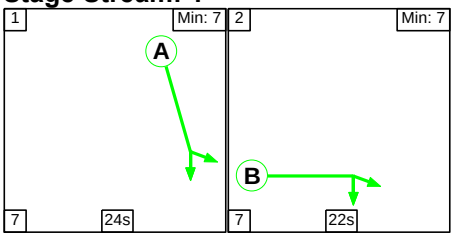
Junction: M23 Junction 10								
Lane	**Lane Width (m)**	**Gradient**	**Nearside Lane**	**Allowed Turns**	**Turning Radius (m)**	**Turning Prop.**	**Sat Flow (PCU/Hr)**	**Flared Sat Flow (PCU/Hr)**
1/1 (A264 Copthorne Way Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
1/2 (A264 Copthorne Way Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/1 (M23 NB Off-Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
2/2 (M23 NB Off-Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
2/3 (M23 NB Off-Slip Lane 3)	This lane uses a directly entered Saturation Flow						1900	1900
3/1 (A2011 Crawley Avenue Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
3/2 (A2011 Crawley Avenue Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
4/1 (M23 SB Off-Slip Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
4/2 (M23 SB Off-Slip Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
5/1 (EB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/1 (SB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
6/2 (SB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
7/1 (WB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
7/2 (WB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
8/1 (NB Exit Lane 1)	Infinite Saturation Flow						Inf	Inf
8/2 (NB Exit Lane 2)	Infinite Saturation Flow						Inf	Inf
9/1 (East Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
9/2 (East Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
10/1 (South Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
10/2 (South Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
11/1 (West Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
11/2 (West Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900
12/1 (North Circ Lane 1)	This lane uses a directly entered Saturation Flow						1900	1900
12/2 (North Circ Lane 2)	This lane uses a directly entered Saturation Flow						1900	1900

Full Input Data And Results

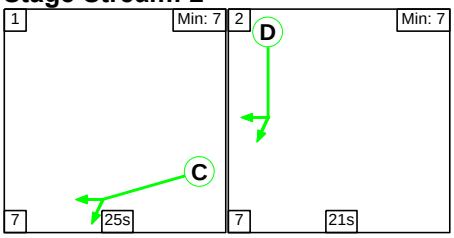
Scenario 1: '2023 Survey AM' (FG1: '2023 Survey AM', Plan 1: 'Existing')

Stage Sequence Diagram

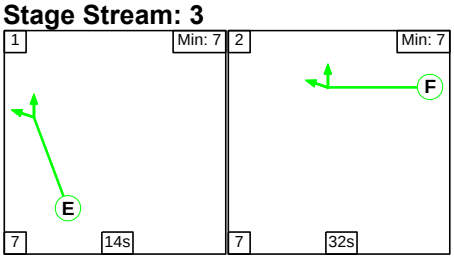
Stage Stream: 1



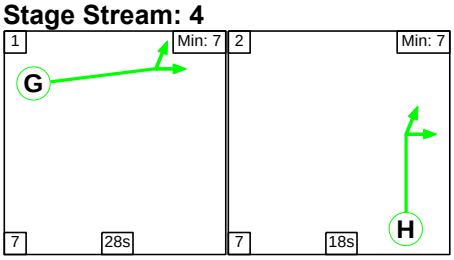
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	24	22
Change Point	47	18

Stage Stream: 2

Stage	1	2
Duration	25	21
Change Point	32	4

Stage Stream: 3

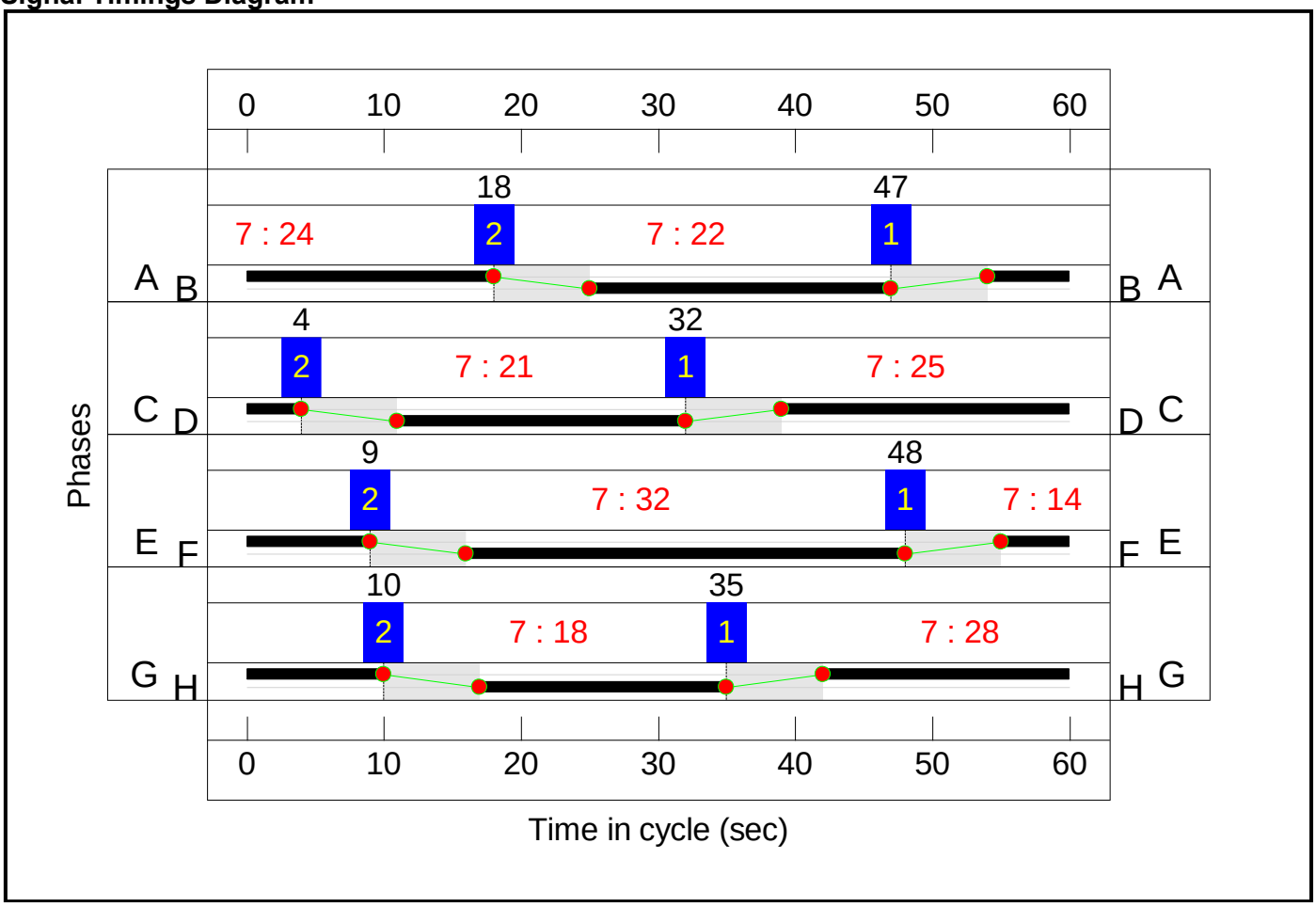
Stage	1	2
Duration	14	32
Change Point	48	9

Full Input Data And Results

Stage Stream: 4

Stage	1	2
Duration	28	18
Change Point	35	10

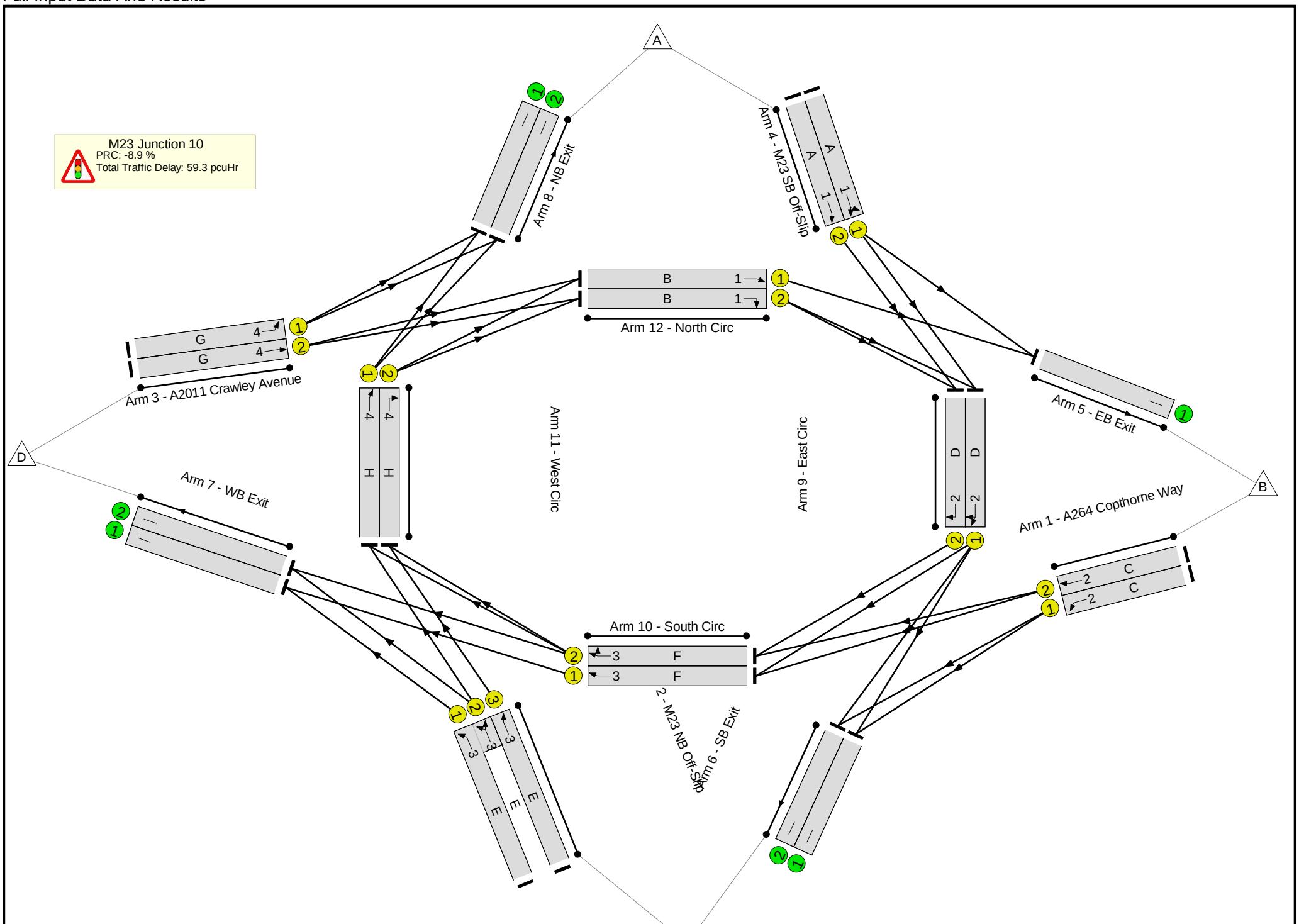
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Full Input Data And 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: M23 Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	**98.0%**
M23 Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	**98.0%**
1/1	A264 Copthorne Way Left	U	2	N/A	C		1	25	-	536	1900	823	65.1%
1/2	A264 Copthorne Way Ahead	U	2	N/A	C		1	25	-	613	1900	823	74.5%
2/1+2/2	M23 NB Off-Slip Left Ahead	U	3	N/A	E		1	14	-	517	1900:1900	308+307	84.1 : 84.1%
2/3	M23 NB Off-Slip Ahead	U	3	N/A	E		1	14	-	460	1900	475	96.8%
3/1	A2011 Crawley Avenue Left	U	4	N/A	G		1	28	-	683	1900	918	74.4%
3/2	A2011 Crawley Avenue Ahead	U	4	N/A	G		1	28	-	558	1900	918	60.8%
4/1	M23 SB Off-Slip Left Ahead	U	1	N/A	A		1	24	-	765	1900	792	96.6%
4/2	M23 SB Off-Slip Ahead	U	1	N/A	A		1	24	-	621	1900	792	78.4%
5/1	EB Exit	U	N/A	N/A	-		-	-	-	1127	Inf	Inf	0.0%
6/1	SB Exit	U	N/A	N/A	-		-	-	-	420	Inf	Inf	0.0%
6/2	SB Exit	U	N/A	N/A	-		-	-	-	421	Inf	Inf	0.0%
7/1	WB Exit	U	N/A	N/A	-		-	-	-	848	Inf	Inf	0.0%
7/2	WB Exit	U	N/A	N/A	-		-	-	-	879	Inf	Inf	0.0%
8/1	NB Exit	U	N/A	N/A	-		-	-	-	530	Inf	Inf	0.0%
8/2	NB Exit	U	N/A	N/A	-		-	-	-	528	Inf	Inf	0.0%
9/1	East Circ Ahead Right	U	2	N/A	D		1	21	-	657	1900	697	94.3%
9/2	East Circ Right	U	2	N/A	D		1	21	-	621	1900	697	89.1%
10/1	South Circ Ahead	U	3	N/A	F		1	32	-	589	1900	1045	56.4%

Full Input Data And Results

10/2	South Circ Ahead Right	U	3	N/A	F		1	32	-	997	1900	1045	95.4%
11/1	West Circ Ahead	U	4	N/A	H		1	18	-	375	1900	602	62.3%
11/2	West Circ Right	U	4	N/A	H		1	18	-	461	1900	602	76.6%
12/1	North Circ Ahead	U	1	N/A	B		1	22	-	714	1900	728	98.0%
12/2	North Circ Right	U	1	N/A	B		1	22	-	305	1900	728	41.9%

Full Input Data And Results

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: M23 Junction 10	**-**	**-**	**0**	**0**	**0**	**34.1**	**25.2**	**0.0**	**59.3**	**-**	**-**	**-**	**-**
M23 Junction 10	**-**	**-**	**0**	**0**	**0**	**34.1**	**25.2**	**0.0**	**59.3**	**-**	**-**	**-**	**-**
1/1	536	536	-	-	-	2.0	0.9	-	2.9	19.6	7.0	0.9	7.9
1/2	613	613	-	-	-	2.4	1.4	-	3.9	22.7	8.5	1.4	10.0
2/1+2/2	517	517	-	-	-	2.9	2.5	-	5.4	37.6	5.6	2.5	8.1
2/3	460	460	-	-	-	2.8	7.6	-	10.5	81.8	7.5	7.6	15.1
3/1	683	683	-	-	-	2.4	1.4	-	3.8	20.1	9.1	1.4	10.5
3/2	558	558	-	-	-	1.8	0.8	-	2.5	16.3	6.7	0.8	7.4
4/1	765	765	-	-	-	3.6	8.7	-	12.3	58.0	12.3	8.7	21.0
4/2	621	621	-	-	-	2.6	1.8	-	4.4	25.5	8.8	1.8	10.6
5/1	1127	1127	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	420	420	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	421	421	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	848	848	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	879	879	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	530	530	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	528	528	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	657	657	-	-	-	3.8	0.0	-	3.8	21.1	10.9	0.0	10.9
9/2	621	621	-	-	-	1.0	0.0	-	1.0	5.6	10.4	0.0	10.4
10/1	589	589	-	-	-	0.9	0.0	-	0.9	5.4	4.0	0.0	4.0
10/2	997	997	-	-	-	1.6	0.0	-	1.6	5.9	6.3	0.0	6.3
11/1	375	375	-	-	-	1.8	0.0	-	1.8	16.8	2.6	0.0	2.6
11/2	461	461	-	-	-	1.2	0.0	-	1.2	9.0	7.7	0.0	7.7
12/1	714	714	-	-	-	1.6	0.0	-	1.6	8.2	4.6	0.0	4.6
12/2	305	305	-	-	-	1.7	0.0	-	1.7	20.1	5.0	0.0	5.0

Full Input Data And Results

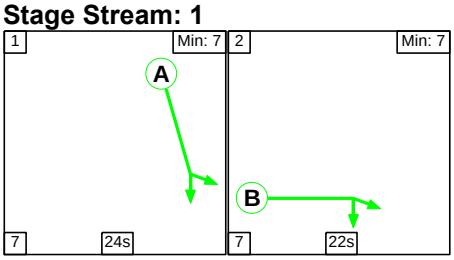
C1	Stream: 1	PRC for Signalled Lanes (%):	-8.9	Total Delay for Signalled Lanes (pcuHr):	20.05	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-4.8	Total Delay for Signalled Lanes (pcuHr):	11.60	Cycle Time (s):	60
C1	Stream: 3	PRC for Signalled Lanes (%):	-7.6	Total Delay for Signalled Lanes (pcuHr):	18.39	Cycle Time (s):	60
C1	Stream: 4	PRC for Signalled Lanes (%):	17.5	Total Delay for Signalled Lanes (pcuHr):	9.24	Cycle Time (s):	60
		PRC Over All Lanes (%):	-8.9	Total Delay Over All Lanes(pcuHr):	59.29		

Full Input Data And Results

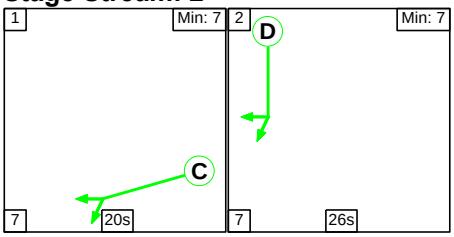
Scenario 2: '2023 Survey PM' (FG2: '2023 Survey PM', Plan 1: 'Existing')

Stage Sequence Diagram

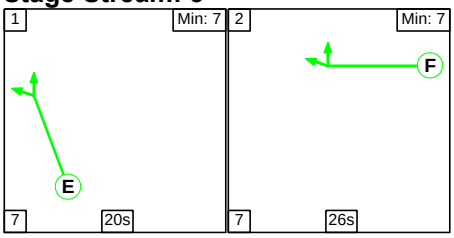
Stage Stream: 1



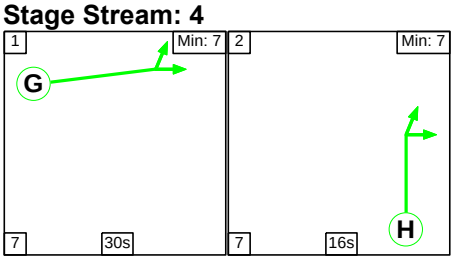
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	24	22
Change Point	0	31

Stage Stream: 2

Stage	1	2
Duration	20	26
Change Point	11	38

Stage Stream: 3

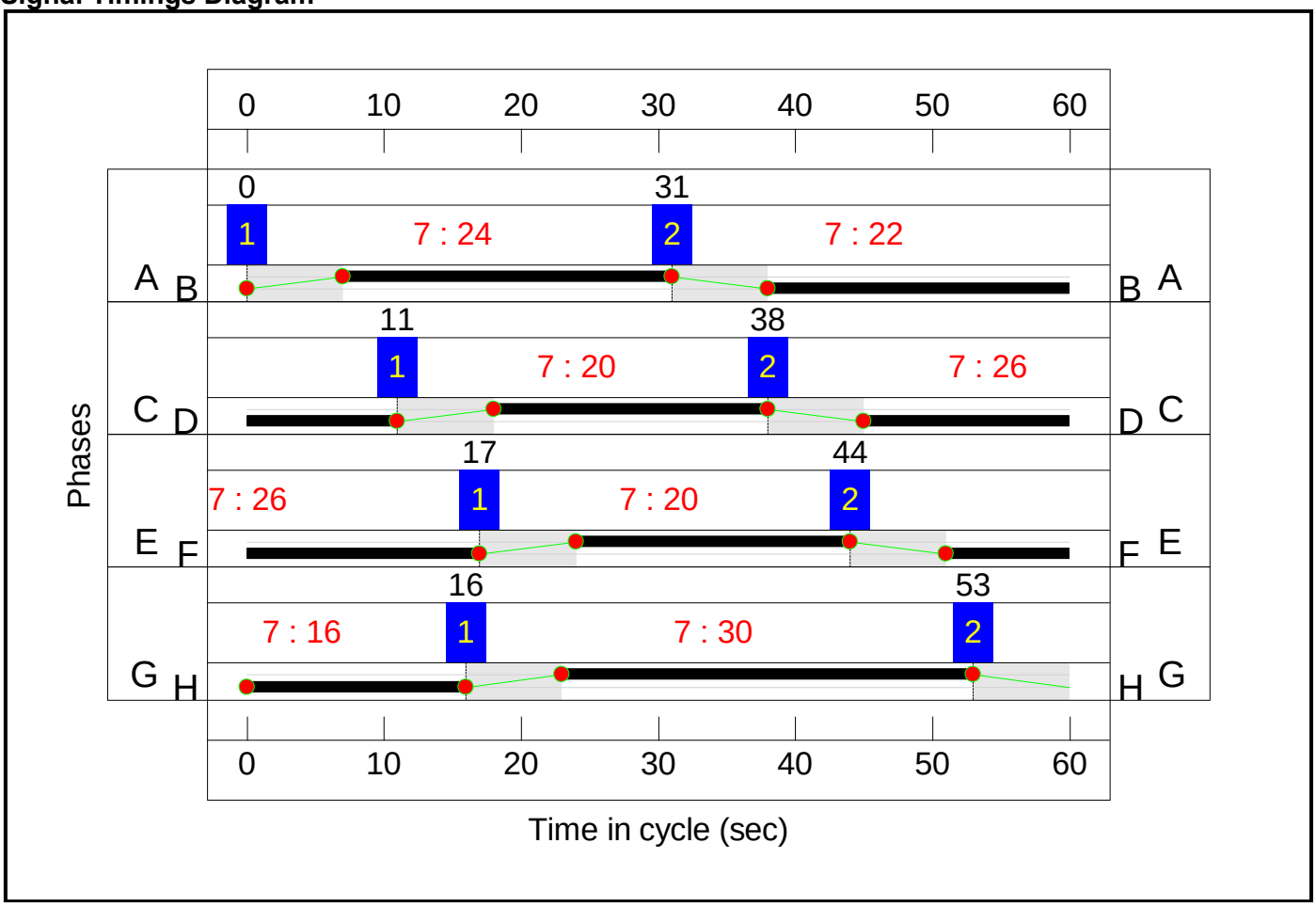
Stage	1	2
Duration	20	26
Change Point	17	44

Full Input Data And Results

Stage Stream: 4

Stage	1	2
Duration	30	16
Change Point	16	53

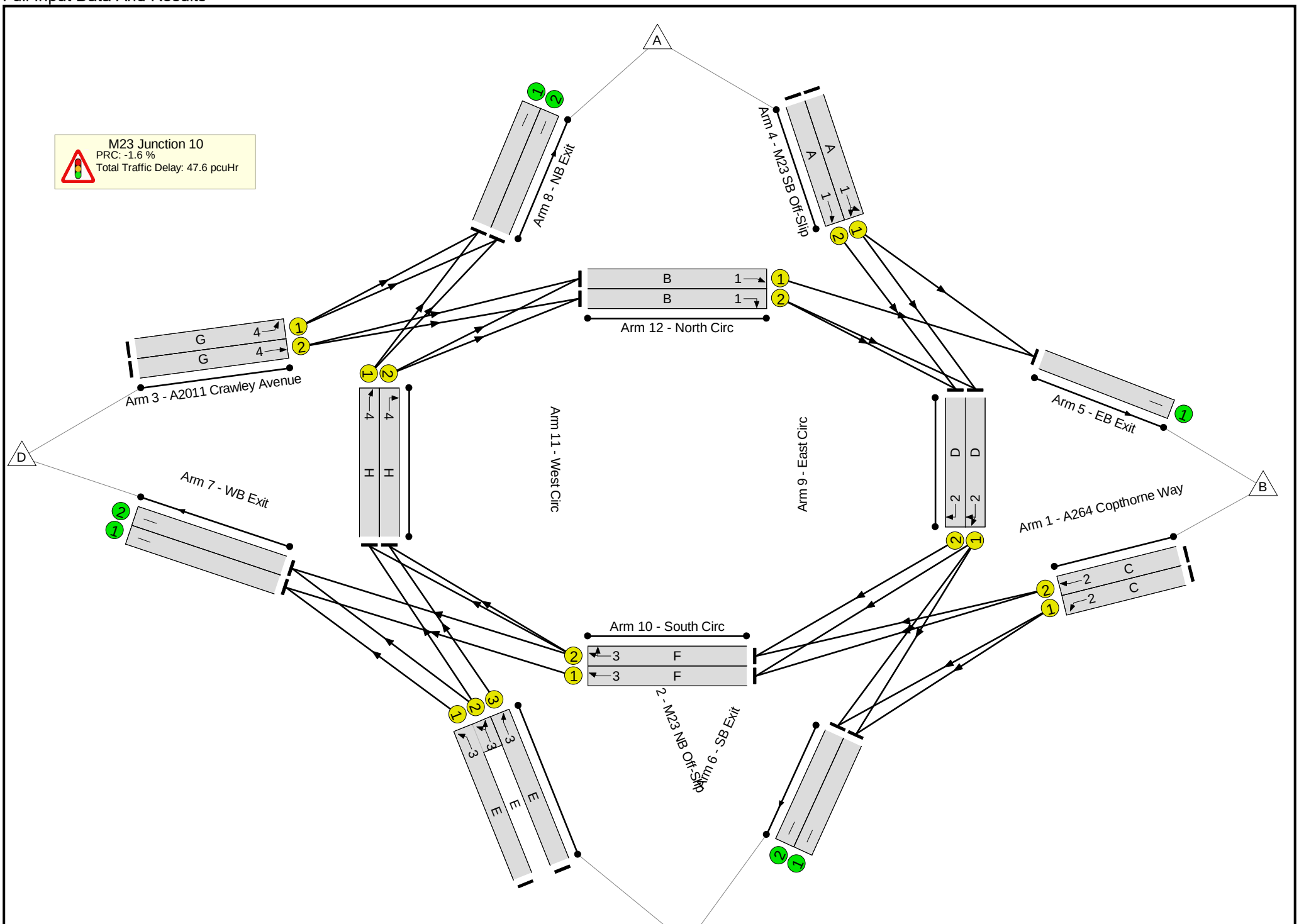
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Full Input Data And 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: M23 Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.4%**
M23 Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	**91.4%**
1/1	A264 Copthorne Way Left	U	2	N/A	C		1	20	-	608	1900	665	91.4%
1/2	A264 Copthorne Way Ahead	U	2	N/A	C		1	20	-	564	1900	665	84.8%
2/1+2/2	M23 NB Off-Slip Left Ahead	U	3	N/A	E		1	20	-	277	1900:1900	404+401	34.4 : 34.4%
2/3	M23 NB Off-Slip Ahead	U	3	N/A	E		1	20	-	490	1900	665	73.7%
3/1	A2011 Crawley Avenue Left	U	4	N/A	G		1	30	-	744	1900	982	75.8%
3/2	A2011 Crawley Avenue Ahead	U	4	N/A	G		1	30	-	784	1900	982	79.9%
4/1	M23 SB Off-Slip Left Ahead	U	1	N/A	A		1	24	-	644	1900	792	81.3%
4/2	M23 SB Off-Slip Ahead	U	1	N/A	A		1	24	-	489	1900	792	61.8%
5/1	EB Exit	U	N/A	N/A	-		-	-	-	1164	Inf	Inf	0.0%
6/1	SB Exit	U	N/A	N/A	-		-	-	-	625	Inf	Inf	0.0%
6/2	SB Exit	U	N/A	N/A	-		-	-	-	627	Inf	Inf	0.0%
7/1	WB Exit	U	N/A	N/A	-		-	-	-	531	Inf	Inf	0.0%
7/2	WB Exit	U	N/A	N/A	-		-	-	-	639	Inf	Inf	0.0%
8/1	NB Exit	U	N/A	N/A	-		-	-	-	507	Inf	Inf	0.0%
8/2	NB Exit	U	N/A	N/A	-		-	-	-	507	Inf	Inf	0.0%
9/1	East Circ Ahead Right	U	2	N/A	D		1	26	-	754	1900	855	88.2%
9/2	East Circ Right	U	2	N/A	D		1	26	-	489	1900	855	57.2%
10/1	South Circ Ahead	U	3	N/A	F		1	26	-	392	1900	855	45.8%

Full Input Data And Results

10/2	South Circ Ahead Right	U	3	N/A	F		1	26	-	771	1900	855	90.2%
11/1	West Circ Ahead	U	4	N/A	H		1	16	-	270	1900	538	50.2%
11/2	West Circ Right	U	4	N/A	H		1	16	-	490	1900	538	91.0%
12/1	North Circ Ahead	U	1	N/A	B		1	22	-	630	1900	728	86.5%
12/2	North Circ Right	U	1	N/A	B		1	22	-	644	1900	728	88.4%

Full Input Data And Results

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: M23 Junction 10	**-**	**-**	**0**	**0**	**0**	**32.3**	**15.3**	**0.0**	**47.6**	**-**	**-**	**-**	**-**
M23 Junction 10	**-**	**-**	**0**	**0**	**0**	**32.3**	**15.3**	**0.0**	**47.6**	**-**	**-**	**-**	**-**
1/1	608	608	-	-	-	3.1	4.6	-	7.7	45.8	9.6	4.6	14.2
1/2	564	564	-	-	-	2.8	2.7	-	5.5	35.0	8.6	2.7	11.3
2/1+2/2	277	277	-	-	-	1.1	0.3	-	1.3	17.1	1.6	0.3	1.9
2/3	490	490	-	-	-	2.3	1.4	-	3.7	27.2	7.1	1.4	8.5
3/1	744	744	-	-	-	2.4	1.5	-	3.9	19.0	9.7	1.5	11.3
3/2	784	784	-	-	-	2.6	1.9	-	4.5	20.9	10.7	1.9	12.6
4/1	644	644	-	-	-	2.8	2.1	-	4.9	27.3	9.3	2.1	11.4
4/2	489	489	-	-	-	1.9	0.8	-	2.7	19.7	6.4	0.8	7.2
5/1	1164	1164	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	625	625	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	627	627	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	531	531	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	639	639	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	507	507	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	754	754	-	-	-	0.6	0.0	-	0.6	2.7	1.8	0.0	1.8
9/2	489	489	-	-	-	3.5	0.0	-	3.5	26.0	8.1	0.0	8.1
10/1	392	392	-	-	-	0.9	0.0	-	0.9	8.2	4.7	0.0	4.7
10/2	771	771	-	-	-	0.9	0.0	-	0.9	4.2	4.7	0.0	4.7
11/1	270	270	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
11/2	490	490	-	-	-	3.1	0.0	-	3.1	22.7	8.2	0.0	8.2
12/1	630	630	-	-	-	3.3	0.0	-	3.3	19.0	10.1	0.0	10.1
12/2	644	644	-	-	-	1.1	0.0	-	1.1	6.0	5.3	0.0	5.3

Full Input Data And Results

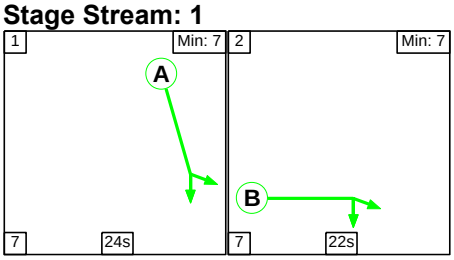
C1	Stream: 1 PRC for Signalled Lanes (%):	1.8	Total Delay for Signalled Lanes (pcuHr):	11.95	Cycle Time (s):	60
C1	Stream: 2 PRC for Signalled Lanes (%):	-1.6	Total Delay for Signalled Lanes (pcuHr):	17.31	Cycle Time (s):	60
C1	Stream: 3 PRC for Signalled Lanes (%):	-0.2	Total Delay for Signalled Lanes (pcuHr):	6.81	Cycle Time (s):	60
C1	Stream: 4 PRC for Signalled Lanes (%):	-1.1	Total Delay for Signalled Lanes (pcuHr):	11.55	Cycle Time (s):	60
	PRC Over All Lanes (%):	-1.6	Total Delay Over All Lanes(pcuHr):	47.62		

Full Input Data And Results

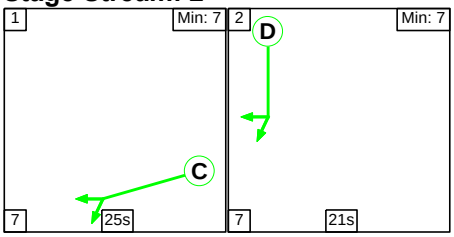
Scenario 3: '2029 Base AM' (FG3: '2029 Base AM', Plan 1: 'Existing')

Stage Sequence Diagram

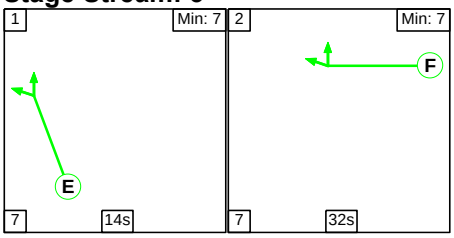
Stage Stream: 1



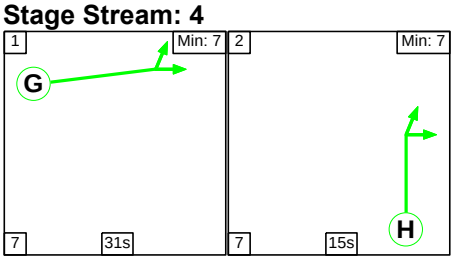
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	24	22
Change Point	0	31

Stage Stream: 2

Stage	1	2
Duration	25	21
Change Point	36	8

Stage Stream: 3

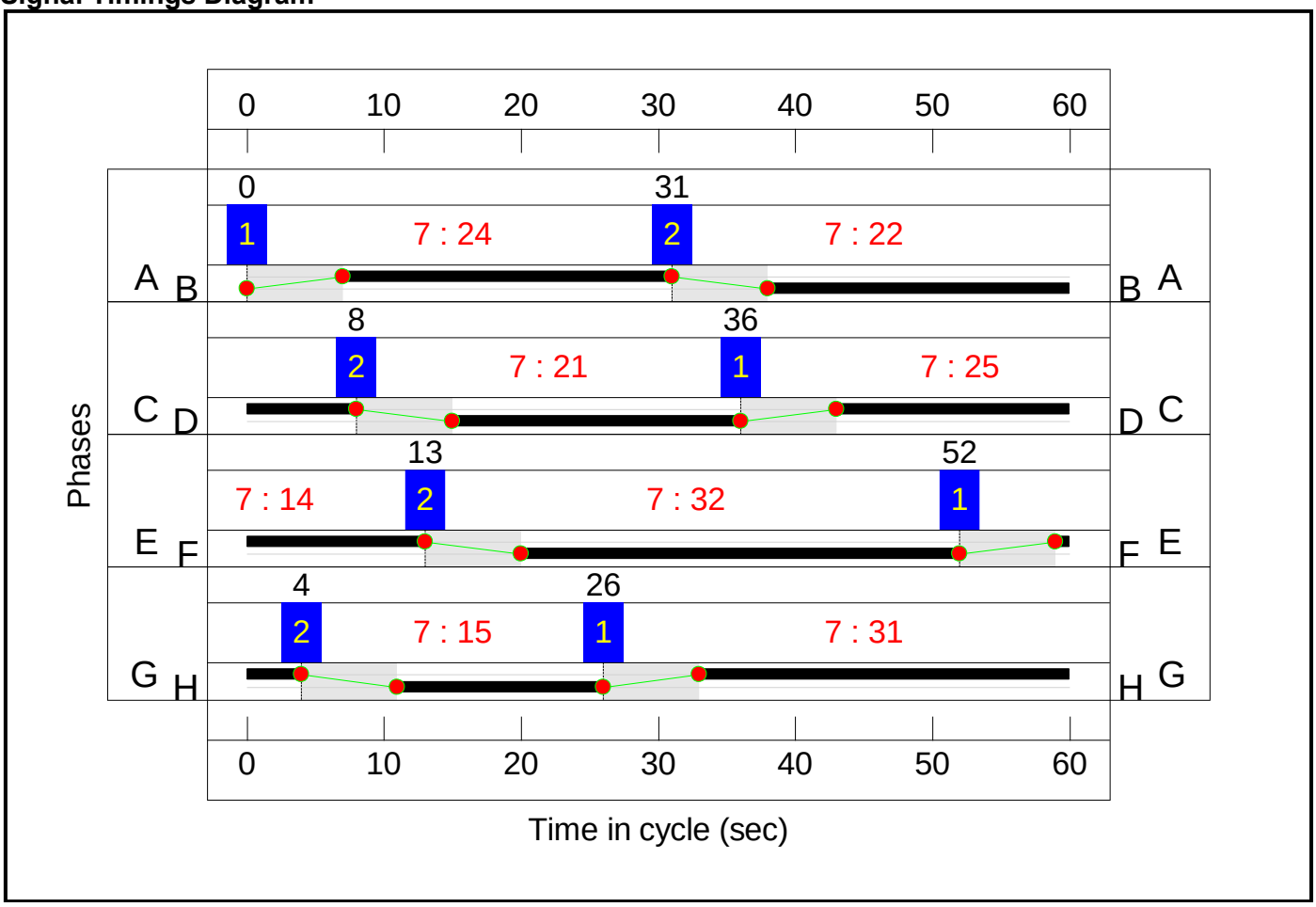
Stage	1	2
Duration	14	32
Change Point	52	13

Full Input Data And Results

Stage Stream: 4

Stage	1	2
Duration	31	15
Change Point	26	4

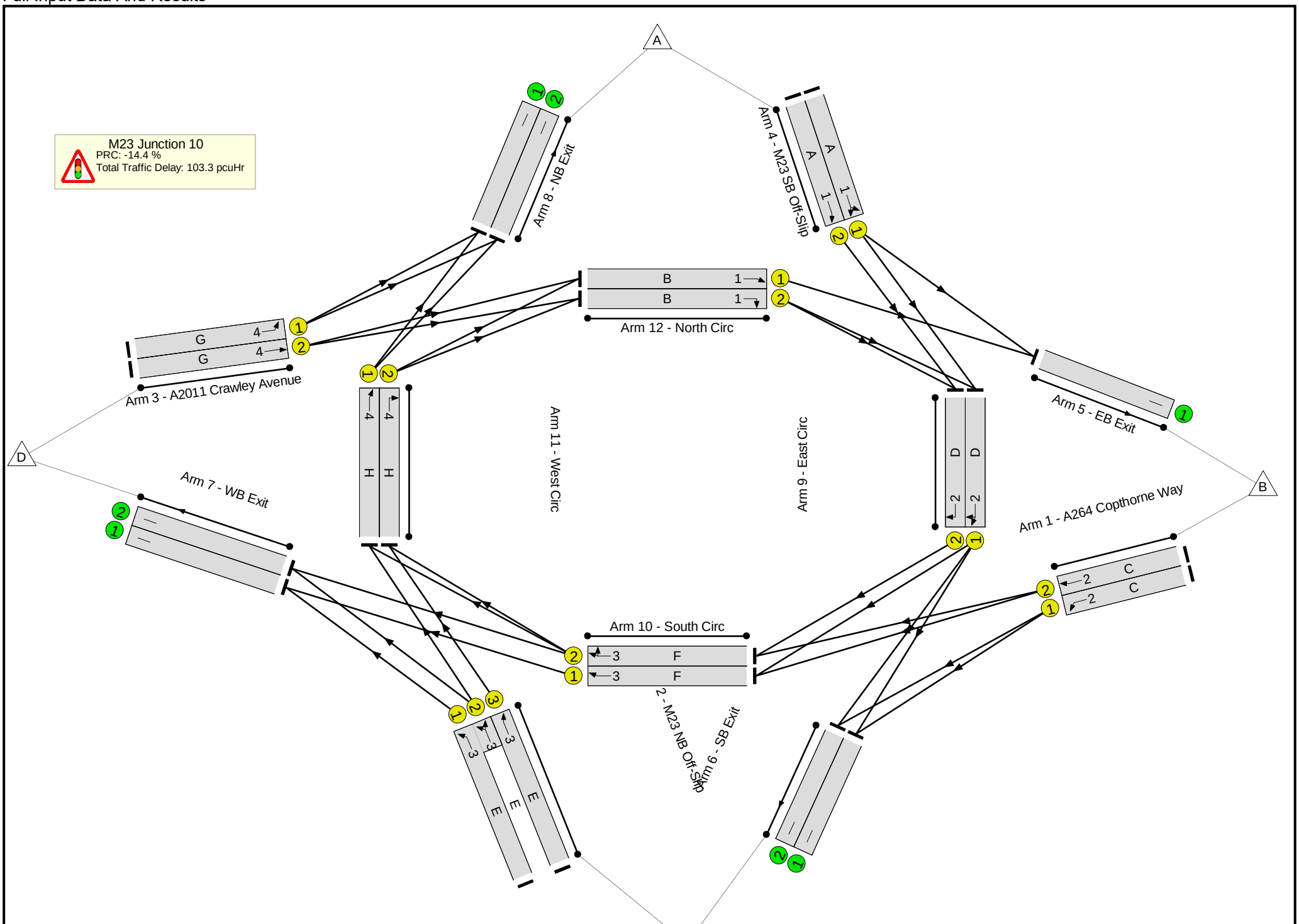
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Full Input Data And 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: M23 Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.9%**
M23 Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	**102.9%**
1/1	A264 Copthorne Way Left	U	2	N/A	C		1	25	-	571	1900	823	69.4%
1/2	A264 Copthorne Way Ahead	U	2	N/A	C		1	25	-	652	1900	823	79.2%
2/1+2/2	M23 NB Off-Slip Left Ahead	U	3	N/A	E		1	14	-	550	1900:1900	307+307	89.5 : 89.5%
2/3	M23 NB Off-Slip Ahead	U	3	N/A	E		1	14	-	489	1900	475	102.9%
3/1	A2011 Crawley Avenue Left	U	4	N/A	G		1	31	-	727	1900	1013	71.7%
3/2	A2011 Crawley Avenue Ahead	U	4	N/A	G		1	31	-	594	1900	1013	58.6%
4/1	M23 SB Off-Slip Left Ahead	U	1	N/A	A		1	24	-	814	1900	792	102.8%
4/2	M23 SB Off-Slip Ahead	U	1	N/A	A		1	24	-	662	1900	792	83.6%
5/1	EB Exit	U	N/A	N/A	-		-	-	-	1200	Inf	Inf	0.0%
6/1	SB Exit	U	N/A	N/A	-		-	-	-	447	Inf	Inf	0.0%
6/2	SB Exit	U	N/A	N/A	-		-	-	-	448	Inf	Inf	0.0%
7/1	WB Exit	U	N/A	N/A	-		-	-	-	901	Inf	Inf	0.0%
7/2	WB Exit	U	N/A	N/A	-		-	-	-	937	Inf	Inf	0.0%
8/1	NB Exit	U	N/A	N/A	-		-	-	-	564	Inf	Inf	0.0%
8/2	NB Exit	U	N/A	N/A	-		-	-	-	562	Inf	Inf	0.0%
9/1	East Circ Ahead Right	U	2	N/A	D		1	21	-	698	1900	697	98.7%
9/2	East Circ Right	U	2	N/A	D		1	21	-	662	1900	697	95.0%
10/1	South Circ Ahead	U	3	N/A	F		1	32	-	626	1900	1045	58.9%

Full Input Data And Results

10/2	South Circ Ahead Right	U	3	N/A	F		1	32	-	1062	1900	1045	101.6%
11/1	West Circ Ahead	U	4	N/A	H		1	15	-	399	1900	507	78.8%
11/2	West Circ Right	U	4	N/A	H		1	15	-	490	1900	507	93.9%
12/1	North Circ Ahead	U	1	N/A	B		1	22	-	760	1900	728	102.4%
12/2	North Circ Right	U	1	N/A	B		1	22	-	324	1900	728	44.5%

Full Input Data And Results

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: M23 Junction 10	**-**	**-**	**0**	**0**	**0**	**38.7**	**64.6**	**0.0**	**103.3**	**-**	**-**	**-**	**-**
M23 Junction 10	**-**	**-**	**0**	**0**	**0**	**38.7**	**64.6**	**0.0**	**103.3**	**-**	**-**	**-**	**-**
1/1	571	571	-	-	-	2.2	1.1	-	3.3	20.8	7.6	1.1	8.7
1/2	652	652	-	-	-	2.7	1.9	-	4.5	25.0	9.2	1.9	11.1
2/1+2/2	550	550	-	-	-	3.1	3.8	-	6.9	45.3	6.4	3.8	10.2
2/3	489	475	-	-	-	3.5	15.1	-	18.6	136.9	8.4	15.1	23.5
3/1	727	727	-	-	-	2.1	1.3	-	3.4	16.8	9.1	1.3	10.3
3/2	594	594	-	-	-	1.6	0.7	-	2.3	13.8	6.6	0.7	7.3
4/1	814	792	-	-	-	4.6	20.9	-	25.5	112.7	13.9	20.9	34.8
4/2	662	662	-	-	-	2.9	2.5	-	5.3	29.0	9.7	2.5	12.2
5/1	1156	1156	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	447	447	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	448	448	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	891	891	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	920	920	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	564	564	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	562	562	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	688	688	-	-	-	3.3	0.0	-	3.3	17.3	11.2	0.0	11.2
9/2	662	662	-	-	-	0.7	0.0	-	0.7	3.6	1.1	0.0	1.1
10/1	616	616	-	-	-	1.2	0.0	-	1.2	6.7	4.6	0.0	4.6
10/2	1062	1045	-	-	-	2.4	8.5	-	10.9	37.1	18.0	8.5	26.5
11/1	399	399	-	-	-	4.1	0.0	-	4.1	36.7	6.7	0.0	6.7
11/2	476	476	-	-	-	0.0	0.0	-	0.0	0.1	0.0	0.0	0.0
12/1	746	728	-	-	-	3.3	8.9	-	12.2	59.0	12.7	8.9	21.6
12/2	324	324	-	-	-	1.1	0.0	-	1.1	12.3	2.3	0.0	2.3

Full Input Data And Results

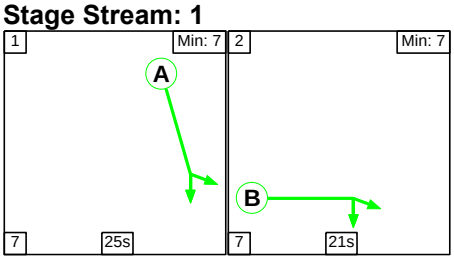
C1	Stream: 1	PRC for Signalled Lanes (%):	-14.2	Total Delay for Signalled Lanes (pcuHr):	44.15	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-9.7	Total Delay for Signalled Lanes (pcuHr):	11.80	Cycle Time (s):	60
C1	Stream: 3	PRC for Signalled Lanes (%):	-14.4	Total Delay for Signalled Lanes (pcuHr):	37.60	Cycle Time (s):	60
C1	Stream: 4	PRC for Signalled Lanes (%):	-4.4	Total Delay for Signalled Lanes (pcuHr):	9.74	Cycle Time (s):	60
		PRC Over All Lanes (%):	-14.4	Total Delay Over All Lanes(pcuHr):	103.29		

Full Input Data And Results

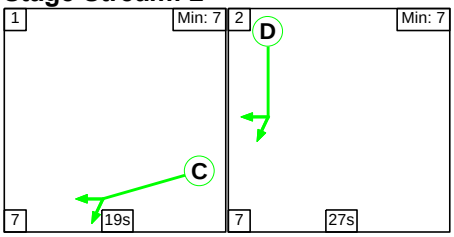
Scenario 4: '2029 Base PM' (FG4: '2029 Base PM', Plan 1: 'Existing')

Stage Sequence Diagram

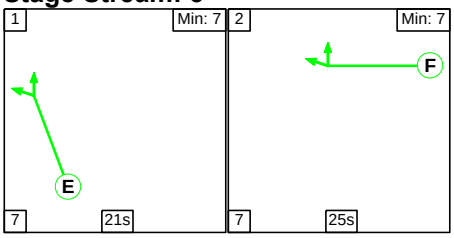
Stage Stream: 1



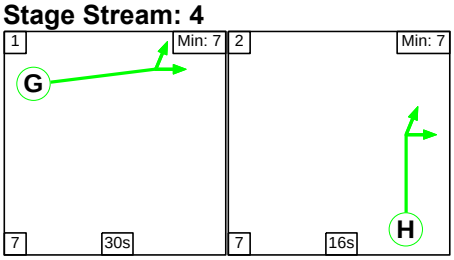
Stage Stream: 2



Stage Stream: 3



Stage Stream: 4



Stage Timings

Stage Stream: 1

Stage	1	2
Duration	25	21
Change Point	0	32

Stage Stream: 2

Stage	1	2
Duration	19	27
Change Point	8	34

Stage Stream: 3

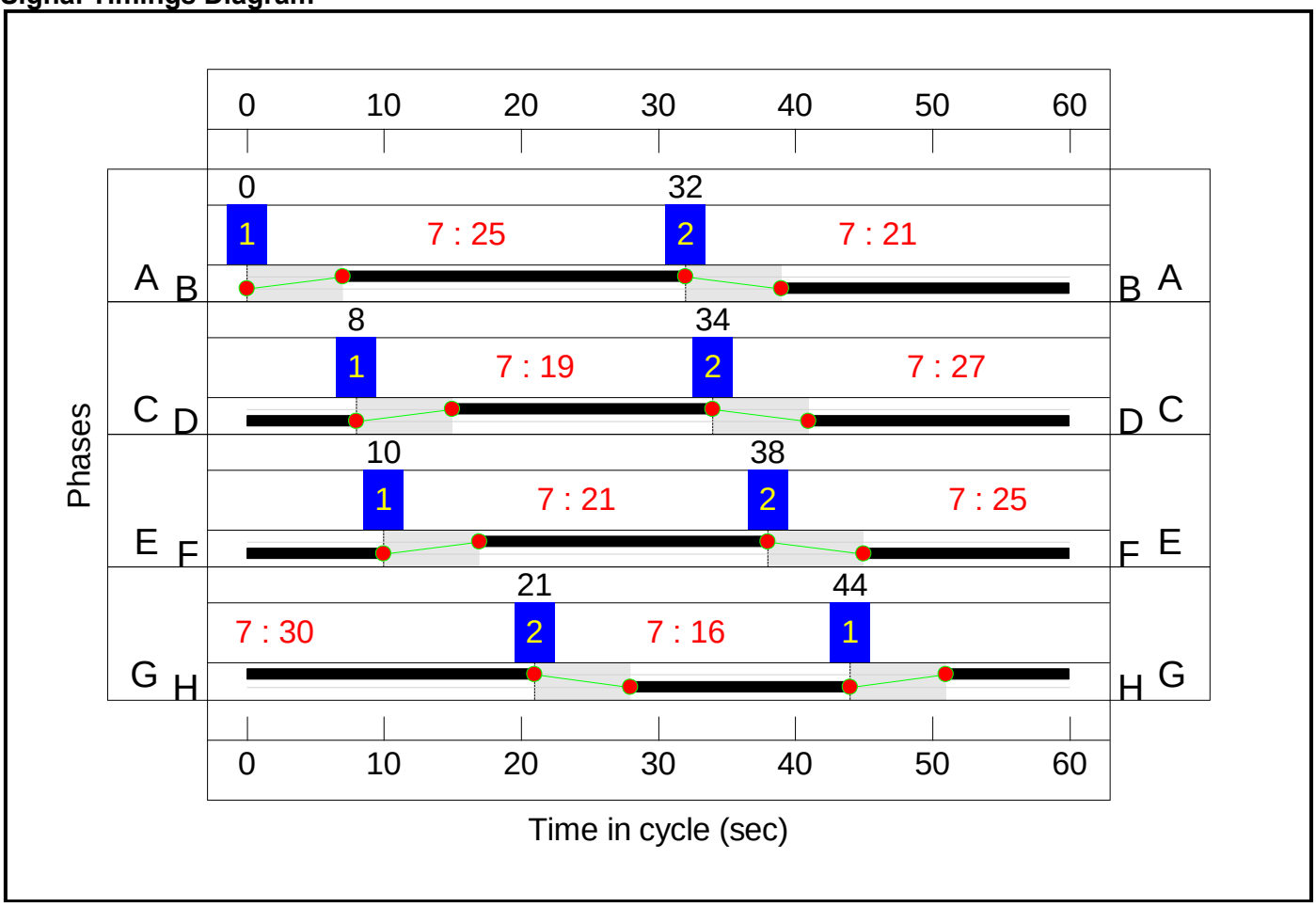
Stage	1	2
Duration	21	25
Change Point	10	38

Full Input Data And Results

Stage Stream: 4

Stage	1	2
Duration	30	16
Change Point	44	21

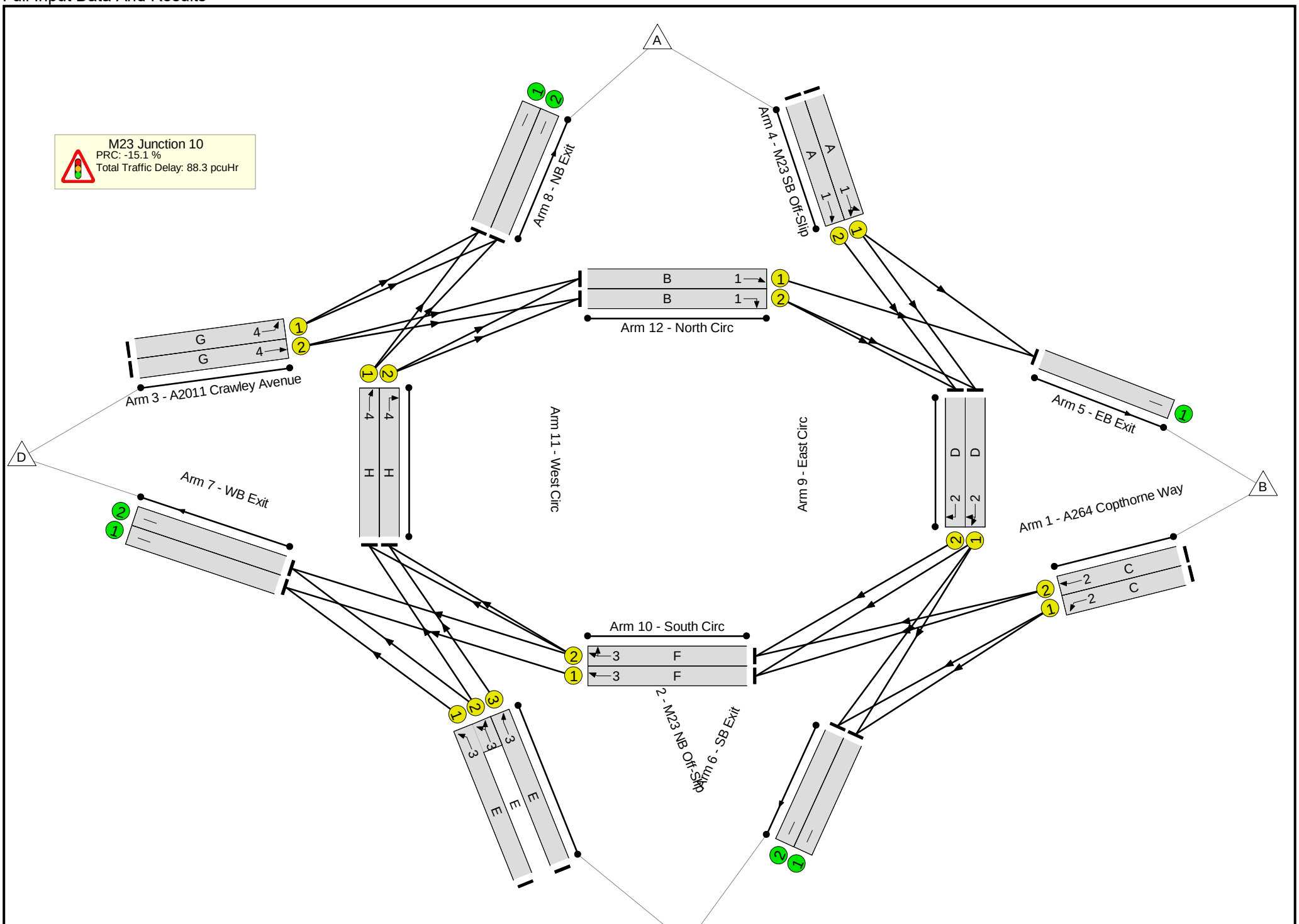
Signal Timings Diagram



Full Input Data And Results

Network Layout Diagram

Full Input Data And Results



Full Input Data And Results

Full Input Data And Results

Network Results

Full Input Data And 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: M23 Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	**103.6%**
M23 Junction 10	-	-	**N/A**	-	-		-	-	-	-	-	-	**103.6%**
1/1	A264 Copthorne Way Left	U	2	N/A	C		1	19	-	656	1900	633	103.6%
1/2	A264 Copthorne Way Ahead	U	2	N/A	C		1	19	-	608	1900	633	96.0%
2/1+2/2	M23 NB Off-Slip Left Ahead	U	3	N/A	E		1	21	-	299	1900:1900	420+417	35.8 : 35.8%
2/3	M23 NB Off-Slip Ahead	U	3	N/A	E		1	21	-	529	1900	697	75.9%
3/1	A2011 Crawley Avenue Left	U	4	N/A	G		1	30	-	803	1900	982	81.8%
3/2	A2011 Crawley Avenue Ahead	U	4	N/A	G		1	30	-	847	1900	982	86.3%
4/1	M23 SB Off-Slip Left Ahead	U	1	N/A	A		1	25	-	783	1900	823	95.1%
4/2	M23 SB Off-Slip Ahead	U	1	N/A	A		1	25	-	440	1900	823	53.4%
5/1	EB Exit	U	N/A	N/A	-		-	-	-	1256	Inf	Inf	0.0%
6/1	SB Exit	U	N/A	N/A	-		-	-	-	676	Inf	Inf	0.0%
6/2	SB Exit	U	N/A	N/A	-		-	-	-	676	Inf	Inf	0.0%
7/1	WB Exit	U	N/A	N/A	-		-	-	-	672	Inf	Inf	0.0%
7/2	WB Exit	U	N/A	N/A	-		-	-	-	591	Inf	Inf	0.0%
8/1	NB Exit	U	N/A	N/A	-		-	-	-	548	Inf	Inf	0.0%
8/2	NB Exit	U	N/A	N/A	-		-	-	-	546	Inf	Inf	0.0%
9/1	East Circ Ahead Right	U	2	N/A	D		1	27	-	903	1900	887	101.8%
9/2	East Circ Right	U	2	N/A	D		1	27	-	440	1900	887	49.6%
10/1	South Circ Ahead	U	3	N/A	F		1	25	-	522	1900	823	63.4%

Full Input Data And Results

10/2	South Circ Ahead Right	U	3	N/A	F		1	25	-	733	1900	823	89.0%
11/1	West Circ Ahead	U	4	N/A	H		1	16	-	291	1900	538	54.1%
11/2	West Circ Right	U	4	N/A	H		1	16	-	529	1900	538	98.3%
12/1	North Circ Ahead	U	1	N/A	B		1	21	-	680	1900	697	97.6%
12/2	North Circ Right	U	1	N/A	B		1	21	-	696	1900	697	99.9%

Full Input Data And Results

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: M23 Junction 10	**-**	**-**	**0**	**0**	**0**	**38.2**	**50.1**	**0.0**	**88.3**	**-**	**-**	**-**	**-**
M23 Junction 10	**-**	**-**	**0**	**0**	**0**	**38.2**	**50.1**	**0.0**	**88.3**	**-**	**-**	**-**	**-**
1/1	656	633	-	-	-	4.2	19.7	-	23.9	131.2	11.3	19.7	31.0
1/2	608	608	-	-	-	3.3	7.5	-	10.8	64.2	9.8	7.5	17.3
2/1+2/2	299	299	-	-	-	1.1	0.3	-	1.4	16.4	1.7	0.3	2.0
2/3	529	529	-	-	-	2.5	1.5	-	4.0	27.2	7.6	1.5	9.2
3/1	803	803	-	-	-	2.7	2.2	-	4.9	22.0	11.2	2.2	13.3
3/2	847	847	-	-	-	3.0	3.0	-	6.0	25.4	12.2	3.0	15.2
4/1	783	783	-	-	-	3.6	7.2	-	10.7	49.3	12.4	7.2	19.6
4/2	440	440	-	-	-	1.5	0.6	-	2.1	17.2	5.4	0.6	5.9
5/1	1256	1256	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/1	657	657	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
6/2	657	657	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/1	672	672	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
7/2	591	591	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/1	548	548	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
8/2	546	546	-	-	-	0.0	0.0	-	0.0	0.0	0.0	0.0	0.0
9/1	903	887	-	-	-	2.4	8.2	-	10.6	42.1	15.3	8.2	23.5
9/2	440	440	-	-	-	2.6	0.0	-	2.6	21.4	7.3	0.0	7.3
10/1	522	522	-	-	-	0.7	0.0	-	0.7	5.0	5.3	0.0	5.3
10/2	733	733	-	-	-	1.0	0.0	-	1.0	4.9	5.4	0.0	5.4
11/1	291	291	-	-	-	2.4	0.0	-	2.4	29.1	4.9	0.0	4.9
11/2	529	529	-	-	-	0.7	0.0	-	0.7	4.7	1.0	0.0	1.0
12/1	680	680	-	-	-	1.2	0.0	-	1.2	6.1	3.0	0.0	3.0
12/2	696	696	-	-	-	5.4	0.0	-	5.4	28.0	11.6	0.0	11.6

Full Input Data And Results

C1	Stream: 1	PRC for Signalled Lanes (%):	-11.0	Total Delay for Signalled Lanes (pcuHr):	19.41	Cycle Time (s):	60
C1	Stream: 2	PRC for Signalled Lanes (%):	-15.1	Total Delay for Signalled Lanes (pcuHr):	47.92	Cycle Time (s):	60
C1	Stream: 3	PRC for Signalled Lanes (%):	1.1	Total Delay for Signalled Lanes (pcuHr):	7.09	Cycle Time (s):	60
C1	Stream: 4	PRC for Signalled Lanes (%):	-9.2	Total Delay for Signalled Lanes (pcuHr):	13.93	Cycle Time (s):	60
		PRC Over All Lanes (%):	-15.1	Total Delay Over All Lanes(pcuHr):	88.34		

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.1.0.1820
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Filename: North Street_East Street_Selsfield Road AM.j10
Path: T:\Projects\9000 Series Project Numbers\9155ITB Wychwood, Turners Hill Rd, Crawley Down\Tech\Assessments\Picady\2024
Report generation date: 13/03/2024 11:01:44

»2023 Observed, AM
»2029 Future Year, AM
»2029 + Committed Development, AM
»2029 + Committed Development + Development (350 Homes), AM
»2029 + Committed Development + Development (450 Homes), AM

Summary of junction performance

	AM		
	Queue (Veh)	Delay (s)	RFC
	2023 Observed		
Stream B-ACD	1.4	28.84	0.59
Stream A-BCD	1.9	11.95	0.56
Stream D-ABC	10.6	116.17	0.97
Stream C-ABD	0.2	4.77	0.09
	2029 Future Year		
Stream B-ACD	1.8	36.88	0.66
Stream A-BCD	2.5	13.86	0.63
Stream D-ABC	22.3	214.15	1.08
Stream C-ABD	0.2	4.68	0.10
	2029 + Committed Development		
Stream B-ACD	1.8	36.88	0.66
Stream A-BCD	2.5	13.85	0.63
Stream D-ABC	22.3	214.15	1.08
Stream C-ABD	0.2	4.68	0.10
	2029 + Committed Development + Development (350 Homes)		
Stream B-ACD	2.0	39.83	0.68
Stream A-BCD	2.8	14.33	0.64
Stream D-ABC	24.2	230.83	1.10
Stream C-ABD	0.2	4.68	0.10
	2029 + Committed Development + Development (450 Homes)		
Stream B-ACD	2.0	40.76	0.69
Stream A-BCD	2.8	14.49	0.65
Stream D-ABC	24.8	235.77	1.11
Stream C-ABD	0.2	4.68	0.10

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

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

File summary

File Description

Title	
Location	
Site number	
Date	08/12/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\manchesterhotdesk
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use 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	Relationship type	Relationship
D1	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓		
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1
D5	Committed Development	AM	ONE HOUR	07:00	08:30	15			
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5
D9	Development 350 Homes	AM	ONE HOUR	07:00	08:30	15			
D11	Development 450 Homes	AM	ONE HOUR	07:00	08:30	15			
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2023-2029 AM		1.0644
G2	2023-2029 PM		1.0794

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2023 Observed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	North Street/East Street/Church Road/Selsfield Road	Crossroads	Two-way	Two-way	Two-way	Two-way		28.04	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	28.04	D

Arms

Arms

Arm	Name	Description	Arm type
A	North Street		Major
B	East Street		Minor
C	Selsfield Road		Major
D	Church Road		Minor

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)
A - North Street	7.00			79.4	✓	0.00
C - Selsfield Road	7.00			81.6	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - East Street	One lane	4.56	19	39
D - Church Road	One lane	3.98	31	17

Slope / Intercept / Capacity

Custom Intercept Adjustments

Custom stream intercept adjustment	Stream	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
2	D-C	✓	Reflect QLS	180

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	620	-	-	-	-	-	-	0.230	0.328	0.230	-	-	-
B-A	582	0.101	0.256	0.256	-	-	-	0.161	0.366	-	0.256	0.256	0.128
B-C	750	0.110	0.278	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	582	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
B-D, offside lane	582	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
C-B	621	0.230	0.230	0.329	-	-	-	-	-	-	-	-	-
D-A	697	-	-	-	-	-	-	0.258	-	0.102	-	-	-
D-B, nearside lane	545	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	545	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	725	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

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	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - North Street		ONE HOUR	✓	492	100.000
B - East Street		ONE HOUR	✓	159	100.000
C - Selsfield Road		ONE HOUR	✓	654	100.000
D - Church Road		ONE HOUR	✓	311	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	13	301	178
	B - East Street	3	0	9	147
	C - Selsfield Road	242	19	0	393
	D - Church Road	29	155	127	0

Vehicle Mix

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

Heavy Vehicle %

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	4	2
	B - East Street	100	0	44	5
	C - Selsfield Road	5	21	0	1
	D - Church Road	10	3	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.59	28.84	1.4	6.4	D	146	219
A-BCD	0.56	11.95	1.9	10.0	B	293	440
A-B						7	10
A-C						152	228
D-ABC	0.97	116.17	10.6	40.2	F	285	428
C-ABD	0.09	4.77	0.2	1.1	A	58	86
C-D						336	504
C-A						207	310

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	120	30	379	0.316	118	0.0	0.5	13.717	B
A-BCD	209	52	661	0.316	206	0.0	0.6	7.892	A
A-B	7	2			7				
A-C	155	39			155				
D-ABC	234	59	431	0.543	230	0.0	1.1	17.501	C
C-ABD	36	9	791	0.046	36	0.0	0.1	4.769	A
C-D	282	71			282				
C-A	174	43			174				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	143	36	346	0.414	142	0.5	0.7	17.598	C
A-BCD	276	69	676	0.409	275	0.6	1.0	8.994	A
A-B	7	2			7				
A-C	159	40			159				
D-ABC	280	70	398	0.702	276	1.1	2.1	28.407	D
C-ABD	52	13	850	0.062	52	0.1	0.1	4.537	A
C-D	331	83			331				
C-A	204	51			204				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	175	44	300	0.583	173	0.7	1.3	27.651	D
A-BCD	392	98	698	0.561	388	1.0	1.9	11.663	B
A-B	6	2			6				
A-C	144	36			144				
D-ABC	342	86	353	0.969	320	2.1	7.9	77.364	F
C-ABD	84	21	934	0.090	83	0.1	0.2	4.256	A
C-D	394	98			394				
C-A	243	61			243				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	175	44	299	0.585	175	1.3	1.4	28.836	D
A-BCD	393	98	699	0.563	393	1.9	1.9	11.951	B
A-B	6	2			6				
A-C	142	36			142				
D-ABC	342	86	352	0.972	332	7.9	10.6	116.171	F
C-ABD	84	21	934	0.090	84	0.2	0.2	4.238	A
C-D	394	98			394				
C-A	242	61			242				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	143	36	344	0.416	145	1.4	0.7	18.348	C
A-BCD	278	70	678	0.410	282	1.9	1.0	9.239	A
A-B	7	2			7				
A-C	157	39			157				
D-ABC	280	70	397	0.705	311	10.6	2.7	51.381	F
C-ABD	53	13	849	0.062	53	0.2	0.1	4.487	A
C-D	331	83			331				
C-A	204	51			204				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	120	30	377	0.317	121	0.7	0.5	14.080	B
A-BCD	210	53	662	0.317	212	1.0	0.7	8.049	A
A-B	7	2			7				
A-C	154	38			154				
D-ABC	234	59	430	0.545	240	2.7	1.2	19.490	C
C-ABD	36	9	790	0.046	37	0.1	0.1	4.745	A
C-D	282	71			282				
C-A	174	43			174				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.45	0.00	0.00	0.45	0.45			N/A	N/A
A-BCD	0.63	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	1.14	0.55	1.07	1.16	1.58			N/A	N/A
C-ABD	0.07	0.00	0.00	0.07	0.07			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.68	0.17	0.91	1.38	1.44			N/A	N/A
A-BCD	0.98	0.54	1.01	1.42	1.47			N/A	N/A
D-ABC	2.14	0.09	1.31	4.88	6.77			N/A	N/A
C-ABD	0.10	0.03	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.31	0.03	0.29	1.31	5.73			N/A	N/A
A-BCD	1.88	0.03	0.29	1.88	7.86			N/A	N/A
D-ABC	7.85	0.21	4.11	19.18	26.15			N/A	N/A
C-ABD	0.18	0.03	0.27	0.49	1.14			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.36	0.03	0.30	1.60	6.36			N/A	N/A
A-BCD	1.93	0.03	0.32	3.35	9.96			N/A	N/A
D-ABC	10.56	0.14	4.25	28.11	40.18			N/A	N/A
C-ABD	0.18	0.00	0.00	0.18	0.18			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.73	0.05	0.53	1.30	1.82			N/A	N/A
A-BCD	1.04	0.39	1.04	1.26	1.65			N/A	N/A
D-ABC	2.69	0.04	0.40	7.23	13.66			N/A	N/A
C-ABD	0.10	0.00	0.00	0.10	0.10			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.47	0.04	0.37	1.32	1.32			N/A	N/A
A-BCD	0.66	0.07	0.71	1.38	1.46			N/A	N/A
D-ABC	1.25	0.03	0.30	1.52	5.88			N/A	N/A
C-ABD	0.07	0.00	0.00	0.07	0.07			N/A	N/A

2029 Future Year, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	North Street/East Street/Church Road/Selsfield Road	Crossroads	Two-way	Two-way	Two-way	Two-way		48.39	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	48.39	E

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	Relationship type	Relationship
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - North Street		ONE HOUR	✓	524	100.000
B - East Street		ONE HOUR	✓	169	100.000
C - Selsfield Road		ONE HOUR	✓	696	100.000
D - Church Road		ONE HOUR	✓	331	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	14	320	189
	B - East Street	3	0	10	156
	C - Selsfield Road	258	20	0	418
	D - Church Road	31	165	135	0

Vehicle Mix

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

Heavy Vehicle %

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	4	2
	B - East Street	100	0	44	5
	C - Selsfield Road	5	21	0	1
	D - Church Road	10	3	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.66	36.88	1.8	9.2	E	155	233
A-BCD	0.63	13.86	2.5	13.2	B	326	490
A-B						6	10
A-C						148	222
D-ABC	1.08	214.15	22.3	53.0	F	304	456
C-ABD	0.10	4.68	0.2	1.3	A	67	100
C-D						354	531
C-A						218	327

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	127	32	368	0.346	125	0.0	0.5	14.722	B
A-BCD	229	57	666	0.344	226	0.0	0.7	8.174	A
A-B	7	2			7				
A-C	158	40			158				
D-ABC	249	62	420	0.593	244	0.0	1.4	19.804	C
C-ABD	41	10	810	0.051	41	0.0	0.1	4.678	A
C-D	299	75			299				
C-A	184	46			184				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	152	38	333	0.457	151	0.5	0.8	19.680	C
A-BCD	306	77	682	0.449	305	0.7	1.2	9.565	A
A-B	7	2			7				
A-C	158	39			158				
D-ABC	298	74	385	0.772	291	1.4	2.9	36.087	E
C-ABD	60	15	873	0.069	60	0.1	0.1	4.448	A
C-D	350	88			350				
C-A	216	54			216				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	186	47	284	0.656	183	0.8	1.7	34.278	D
A-BCD	440	110	706	0.623	435	1.2	2.4	13.332	B
A-B	6	1			6				
A-C	131	33			131				
D-ABC	364	91	337	1.080	321	2.9	13.8	118.400	F
C-ABD	98	25	964	0.102	98	0.1	0.2	4.179	A
C-D	414	103			414				
C-A	255	64			255				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	186	47	283	0.659	186	1.7	1.8	36.880	E
A-BCD	443	111	708	0.625	442	2.4	2.5	13.856	B
A-B	6	1			6				
A-C	128	32			128				
D-ABC	364	91	336	1.085	330	13.8	22.3	214.148	F
C-ABD	99	25	964	0.102	99	0.2	0.2	4.162	A
C-D	413	103			413				
C-A	255	64			255				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	152	38	330	0.461	156	1.8	0.9	21.067	C
A-BCD	309	77	685	0.451	314	2.5	1.3	9.944	A
A-B	7	2			7				
A-C	155	39			155				
D-ABC	298	74	383	0.776	366	22.3	5.3	146.322	F
C-ABD	60	15	873	0.069	61	0.2	0.1	4.400	A
C-D	350	87			350				
C-A	215	54			215				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	127	32	366	0.348	129	0.9	0.5	15.232	C
A-BCD	231	58	667	0.346	233	1.3	0.8	8.374	A
A-B	7	2			7				
A-C	156	39			156				
D-ABC	249	62	419	0.595	264	5.3	1.6	25.177	D
C-ABD	41	10	810	0.051	41	0.1	0.1	4.655	A
C-D	299	75			299				
C-A	184	46			184				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.52	0.52	1.00	1.40	1.45			N/A	N/A
A-BCD	0.73	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	1.38	0.39	1.27	1.91	2.36			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.81	0.14	0.91	1.42	1.49			N/A	N/A
A-BCD	1.17	0.53	1.12	1.53	1.78			N/A	N/A
D-ABC	2.91	0.10	1.13	6.93	9.70			N/A	N/A
C-ABD	0.12	0.03	0.26	0.47	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.72	0.03	0.32	3.35	8.99			N/A	N/A
A-BCD	2.43	0.03	0.32	4.03	12.53			N/A	N/A
D-ABC	13.76	1.59	10.82	26.95	33.28			N/A	N/A
C-ABD	0.22	0.03	0.28	0.50	1.30			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.82	0.03	0.31	2.82	9.19			N/A	N/A
A-BCD	2.52	0.03	0.32	4.53	13.20			N/A	N/A
D-ABC	22.27	3.27	18.07	43.20	52.97			N/A	N/A
C-ABD	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.89	0.05	0.47	1.90	2.85			N/A	N/A
A-BCD	1.26	0.22	1.17	1.85	2.24			N/A	N/A
D-ABC	5.27	0.06	1.17	15.01	23.94			N/A	N/A
C-ABD	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.55	0.03	0.35	1.11	1.96			N/A	N/A
A-BCD	0.77	0.06	0.69	1.18	1.70			N/A	N/A
D-ABC	1.55	0.03	0.29	1.55	6.59			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2029 + Committed Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	North Street/East Street/Church Road/Selsfield Road	Crossroads	Two-way	Two-way	Two-way	Two-way		48.39	E

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	48.39	E

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	Relationship type	Relationship
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - North Street		ONE HOUR	✓	524	100.000
B - East Street		ONE HOUR	✓	169	100.000
C - Selsfield Road		ONE HOUR	✓	696	100.000
D - Church Road		ONE HOUR	✓	331	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	14	320	189
	B - East Street	3	0	10	156
	C - Selsfield Road	258	20	0	418
	D - Church Road	31	165	135	0

Vehicle Mix

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

Heavy Vehicle %

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	4	2
	B - East Street	100	0	44	5
	C - Selsfield Road	5	21	0	1
	D - Church Road	10	3	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.66	36.88	1.8	9.2	E	155	233
A-BCD	0.63	13.85	2.5	13.2	B	326	490
A-B						6	10
A-C						148	222
D-ABC	1.08	214.15	22.3	53.0	F	304	456
C-ABD	0.10	4.68	0.2	1.3	A	67	100
C-D						354	531
C-A						218	327

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	127	32	368	0.346	125	0.0	0.5	14.722	B
A-BCD	229	57	666	0.344	226	0.0	0.7	8.174	A
A-B	7	2			7				
A-C	158	40			158				
D-ABC	249	62	420	0.593	244	0.0	1.4	19.804	C
C-ABD	41	10	810	0.051	41	0.0	0.1	4.678	A
C-D	299	75			299				
C-A	184	46			184				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	152	38	333	0.457	151	0.5	0.8	19.680	C
A-BCD	306	77	682	0.449	305	0.7	1.2	9.565	A
A-B	7	2			7				
A-C	158	39			158				
D-ABC	298	74	385	0.772	291	1.4	2.9	36.087	E
C-ABD	60	15	873	0.069	60	0.1	0.1	4.448	A
C-D	350	88			350				
C-A	216	54			216				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	186	47	284	0.656	183	0.8	1.7	34.278	D
A-BCD	440	110	706	0.623	435	1.2	2.4	13.332	B
A-B	6	1			6				
A-C	131	33			131				
D-ABC	364	91	337	1.080	321	2.9	13.8	118.400	F
C-ABD	98	25	964	0.102	98	0.1	0.2	4.177	A
C-D	414	103			414				
C-A	255	64			255				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	186	47	283	0.659	186	1.7	1.8	36.880	E
A-BCD	443	111	708	0.625	442	2.4	2.5	13.854	B
A-B	6	1			6				
A-C	128	32			128				
D-ABC	364	91	336	1.085	330	13.8	22.3	214.148	F
C-ABD	99	25	964	0.102	99	0.2	0.2	4.164	A
C-D	413	103			413				
C-A	255	64			255				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	152	38	330	0.461	156	1.8	0.9	21.067	C
A-BCD	309	77	685	0.451	314	2.5	1.3	9.944	A
A-B	7	2			7				
A-C	155	39			155				
D-ABC	298	74	383	0.776	366	22.3	5.3	146.322	F
C-ABD	60	15	873	0.069	61	0.2	0.1	4.398	A
C-D	350	87			350				
C-A	215	54			215				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	127	32	366	0.348	129	0.9	0.5	15.232	C
A-BCD	231	58	667	0.346	233	1.3	0.8	8.375	A
A-B	7	2			7				
A-C	156	39			156				
D-ABC	249	62	419	0.595	264	5.3	1.6	25.177	D
C-ABD	41	10	810	0.051	41	0.1	0.1	4.655	A
C-D	299	75			299				
C-A	184	46			184				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.52	0.52	1.00	1.40	1.45			N/A	N/A
A-BCD	0.73	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	1.38	0.39	1.27	1.91	2.36			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.81	0.14	0.91	1.42	1.49			N/A	N/A
A-BCD	1.17	0.53	1.12	1.53	1.78			N/A	N/A
D-ABC	2.91	0.10	1.13	6.93	9.70			N/A	N/A
C-ABD	0.12	0.03	0.26	0.47	0.49			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.72	0.03	0.32	3.35	8.99			N/A	N/A
A-BCD	2.43	0.03	0.32	4.03	12.53			N/A	N/A
D-ABC	13.76	1.59	10.82	26.95	33.28			N/A	N/A
C-ABD	0.22	0.03	0.28	0.50	1.30			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.82	0.03	0.31	2.82	9.19			N/A	N/A
A-BCD	2.52	0.03	0.32	4.53	13.20			N/A	N/A
D-ABC	22.27	3.27	18.07	43.20	52.97			N/A	N/A
C-ABD	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.89	0.05	0.47	1.90	2.85			N/A	N/A
A-BCD	1.26	0.22	1.17	1.85	2.24			N/A	N/A
D-ABC	5.27	0.06	1.17	15.01	23.94			N/A	N/A
C-ABD	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.55	0.03	0.35	1.11	1.96			N/A	N/A
A-BCD	0.77	0.06	0.69	1.18	1.70			N/A	N/A
D-ABC	1.55	0.03	0.29	1.55	6.59			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2029 + Committed Development + Development (350 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	North Street/East Street/Church Road/Selsfield Road	Crossroads	Two-way	Two-way	Two-way	Two-way		51.60	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	51.60	F

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	Relationship type	Relationship
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - North Street		ONE HOUR	✓	543	100.000
B - East Street		ONE HOUR	✓	172	100.000
C - Selsfield Road		ONE HOUR	✓	699	100.000
D - Church Road		ONE HOUR	✓	332	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	22	329	192
	B - East Street	6	0	10	156
	C - Selsfield Road	260	20	0	418
	D - Church Road	32	165	135	0

Vehicle Mix

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

Heavy Vehicle %

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	4	2
	B - East Street	53	0	44	5
	C - Selsfield Road	5	21	0	1
	D - Church Road	10	3	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.68	39.83	2.0	10.3	E	158	237
A-BCD	0.64	14.33	2.8	14.6	B	341	511
A-B						10	15
A-C						147	221
D-ABC	1.10	230.83	24.2	54.8	F	305	457
C-ABD	0.10	4.68	0.2	1.3	A	67	101
C-D						354	531
C-A						220	330

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	130	32	365	0.355	127	0.0	0.5	14.999	B
A-BCD	238	59	674	0.353	235	0.0	0.8	8.165	A
A-B	11	3			11				
A-C	160	40			160				
D-ABC	250	62	418	0.598	244	0.0	1.4	20.119	C
C-ABD	41	10	810	0.051	41	0.0	0.1	4.683	A
C-D	299	75			299				
C-A	186	47			186				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	155	39	329	0.469	153	0.5	0.9	20.300	C
A-BCD	319	80	692	0.461	317	0.8	1.2	9.617	A
A-B	11	3			11				
A-C	158	40			158				
D-ABC	298	75	383	0.780	292	1.4	3.0	37.283	E
C-ABD	61	15	873	0.069	61	0.1	0.1	4.453	A
C-D	350	87			350				
C-A	218	54			218				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	189	47	280	0.676	185	0.9	1.9	36.523	E
A-BCD	461	115	719	0.641	456	1.2	2.7	13.715	B
A-B	9	2			9				
A-C	128	32			128				
D-ABC	365	91	334	1.095	319	3.0	14.7	125.163	F
C-ABD	100	25	964	0.103	99	0.1	0.2	4.186	A
C-D	413	103			413				
C-A	257	64			257				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	189	47	278	0.681	189	1.9	2.0	39.833	E
A-BCD	465	116	722	0.644	464	2.7	2.8	14.334	B
A-B	8	2			8				
A-C	125	31			125				
D-ABC	365	91	332	1.101	327	14.7	24.2	230.828	F
C-ABD	100	25	964	0.104	100	0.2	0.2	4.170	A
C-D	413	103			413				
C-A	257	64			257				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	155	39	326	0.474	159	2.0	0.9	21.986	C
A-BCD	322	81	696	0.463	328	2.8	1.3	10.046	B
A-B	10	3			10				
A-C	155	39			155				
D-ABC	298	75	380	0.785	365	24.2	7.5	166.657	F
C-ABD	61	15	873	0.070	61	0.2	0.1	4.404	A
C-D	350	87			350				
C-A	218	54			218				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	130	32	364	0.356	131	0.9	0.6	15.572	C
A-BCD	240	60	676	0.355	242	1.3	0.8	8.379	A
A-B	11	3			11				
A-C	158	40			158				
D-ABC	250	62	416	0.600	274	7.5	1.6	28.763	D
C-ABD	42	10	809	0.051	42	0.1	0.1	4.658	A
C-D	299	75			299				
C-A	186	46			186				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.54	0.54	1.00	1.40	1.45			N/A	N/A
A-BCD	0.77	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	1.41	0.32	1.28	1.97	2.54			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.85	0.13	0.92	1.27	1.27			N/A	N/A
A-BCD	1.24	0.52	1.17	1.68	1.88			N/A	N/A
D-ABC	3.01	0.10	1.19	7.23	10.07			N/A	N/A
C-ABD	0.12	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.87	0.03	0.33	4.03	9.82			N/A	N/A
A-BCD	2.65	0.03	0.33	5.09	14.06			N/A	N/A
D-ABC	14.68	2.11	11.83	28.05	34.33			N/A	N/A
C-ABD	0.22	0.03	0.28	0.50	1.31			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.99	0.03	0.32	3.40	10.27			N/A	N/A
A-BCD	2.76	0.03	0.33	5.14	14.58			N/A	N/A
D-ABC	24.19	4.45	20.23	45.27	54.80			N/A	N/A
C-ABD	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.94	0.05	0.46	2.08	3.21			N/A	N/A
A-BCD	1.34	0.20	1.21	1.97	2.60			N/A	N/A
D-ABC	7.50	0.13	2.98	19.70	28.06			N/A	N/A
C-ABD	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.57	0.03	0.34	1.22	2.20			N/A	N/A
A-BCD	0.81	0.06	0.68	1.40	1.85			N/A	N/A
D-ABC	1.60	0.03	0.29	1.60	6.69			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

2029 + Committed Development + Development (450 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	North Street/East Street/Church Road/Selsfield Road	Crossroads	Two-way	Two-way	Two-way	Two-way		52.56	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	52.56	F

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	Relationship type	Relationship
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - North Street		ONE HOUR	✓	548	100.000
B - East Street		ONE HOUR	✓	173	100.000
C - Selsfield Road		ONE HOUR	✓	700	100.000
D - Church Road		ONE HOUR	✓	332	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	24	331	193
	B - East Street	7	0	10	156
	C - Selsfield Road	261	20	0	418
	D - Church Road	32	165	135	0

Vehicle Mix

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

Heavy Vehicle %

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	4	2
	B - East Street	47	0	44	5
	C - Selsfield Road	5	21	0	1
	D - Church Road	10	3	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.69	40.76	2.0	10.6	E	159	238
A-BCD	0.65	14.49	2.8	15.0	B	345	518
A-B						11	16
A-C						147	221
D-ABC	1.11	235.77	24.8	55.3	F	305	457
C-ABD	0.10	4.68	0.2	1.3	A	68	101
C-D						354	530
C-A						221	331

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	130	33	365	0.357	128	0.0	0.5	15.081	C
A-BCD	240	60	677	0.355	237	0.0	0.8	8.164	A
A-B	12	3			12				
A-C	161	40			161				
D-ABC	250	63	417	0.599	244	0.0	1.4	20.210	C
C-ABD	41	10	809	0.051	41	0.0	0.1	4.684	A
C-D	299	75			299				
C-A	187	47			187				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	155	39	328	0.473	154	0.5	0.9	20.483	C
A-BCD	323	81	696	0.464	321	0.8	1.3	9.635	A
A-B	12	3			12				
A-C	158	40			158				
D-ABC	299	75	382	0.782	292	1.4	3.0	37.638	E
C-ABD	61	15	873	0.070	61	0.1	0.1	4.456	A
C-D	350	87			350				
C-A	218	55			218				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	190	48	279	0.682	186	0.9	1.9	37.214	E
A-BCD	468	117	723	0.647	462	1.3	2.7	13.838	B
A-B	9	2			9				
A-C	127	32			127				
D-ABC	366	91	333	1.100	318	3.0	14.9	127.166	F
C-ABD	100	25	964	0.104	100	0.1	0.2	4.188	A
C-D	413	103			413				
C-A	258	64			258				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	190	48	277	0.687	190	1.9	2.0	40.764	E
A-BCD	471	118	726	0.649	471	2.7	2.8	14.487	B
A-B	9	2			9				
A-C	123	31			123				
D-ABC	366	91	331	1.105	327	14.9	24.8	235.771	F
C-ABD	100	25	964	0.104	100	0.2	0.2	4.174	A
C-D	412	103			412				
C-A	258	64			258				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	155	39	325	0.478	160	2.0	1.0	22.270	C
A-BCD	326	82	699	0.467	332	2.8	1.4	10.078	B
A-B	11	3			11				
A-C	155	39			155				
D-ABC	299	75	379	0.787	365	24.8	8.3	172.793	F
C-ABD	61	15	873	0.070	62	0.2	0.1	4.406	A
C-D	350	87			350				
C-A	218	55			218				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	130	33	363	0.359	132	1.0	0.6	15.671	C
A-BCD	242	61	679	0.357	244	1.4	0.8	8.381	A
A-B	12	3			12				
A-C	159	40			159				
D-ABC	250	63	416	0.602	277	8.3	1.6	30.145	D
C-ABD	42	10	809	0.052	42	0.1	0.1	4.661	A
C-D	299	75			299				
C-A	186	47			186				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.54	0.54	1.00	1.40	1.45			N/A	N/A
A-BCD	0.78	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	1.41	0.30	1.28	1.99	2.59			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.86	0.13	0.92	1.36	1.36			N/A	N/A
A-BCD	1.26	0.52	1.19	1.72	1.91			N/A	N/A
D-ABC	3.05	0.10	1.21	7.32	10.20			N/A	N/A
C-ABD	0.12	0.03	0.26	0.47	0.50			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.91	0.03	0.34	4.26	10.03			N/A	N/A
A-BCD	2.72	0.03	0.33	5.42	14.51			N/A	N/A
D-ABC	14.95	2.25	12.13	28.39	34.67			N/A	N/A
C-ABD	0.22	0.03	0.28	0.50	1.32			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	2.05	0.03	0.32	3.59	10.61			N/A	N/A
A-BCD	2.84	0.03	0.33	5.35	15.00			N/A	N/A
D-ABC	24.76	4.82	20.86	45.87	55.34			N/A	N/A
C-ABD	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.95	0.05	0.45	2.15	3.33			N/A	N/A
A-BCD	1.36	0.19	1.22	2.04	2.69			N/A	N/A
D-ABC	8.26	0.17	3.88	20.94	29.12			N/A	N/A
C-ABD	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.57	0.03	0.34	1.25	2.29			N/A	N/A
A-BCD	0.82	0.06	0.67	1.45	1.89			N/A	N/A
D-ABC	1.61	0.03	0.29	1.61	6.72			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.1.0.1820
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Filename: North Street_East Street_Selsfield Road PM.j10
Path: T:\Projects\9000 Series Project Numbers\9155ITB Wychwood, Turners Hill Rd, Crawley Down\Tech\Assessments\Picady\2024
Report generation date: 13/03/2024 11:17:20

»2023 Observed, PM
»2029 Future Year, PM
»2029 + Committed Development, PM
»2029 + Committed Development + Development (350 Homes), PM
»2029 + Committed Development + Development (450 Homes), PM

Summary of junction performance

	PM		
	Queue (Veh)	Delay (s)	RFC
	2023 Observed		
Stream B-ACD	0.8	17.88	0.44
Stream A-BCD	0.9	7.00	0.36
Stream D-ABC	9.7	104.23	0.96
Stream C-ABD	0.1	5.33	0.04
	2029 Future Year		
Stream B-ACD	1.0	21.14	0.50
Stream A-BCD	1.2	7.41	0.41
Stream D-ABC	23.3	214.09	1.09
Stream C-ABD	0.1	5.23	0.05
	2029 + Committed Development		
Stream B-ACD	1.0	21.14	0.50
Stream A-BCD	1.2	7.41	0.41
Stream D-ABC	23.3	214.09	1.09
Stream C-ABD	0.1	5.23	0.05
	2029 + Committed Development + Development (350 Homes)		
Stream B-ACD	1.1	23.09	0.53
Stream A-BCD	1.2	7.47	0.42
Stream D-ABC	25.6	231.99	1.10
Stream C-ABD	0.1	5.21	0.05
	2029 + Committed Development + Development (450 Homes)		
Stream B-ACD	1.2	23.71	0.54
Stream A-BCD	1.2	7.49	0.42
Stream D-ABC	26.2	237.29	1.11
Stream C-ABD	0.1	5.20	0.05

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

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

File summary

File Description

Title	
Location	
Site number	
Date	08/12/2023
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\manchesterhotdesk
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use 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	Relationship type	Relationship
D2	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓		
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2
D6	Committed Development	PM	ONE HOUR	16:30	18:00	15			
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6
D10	Development 350 Homes	PM	ONE HOUR	16:30	18:00	15			
D12	Development 450 Homes	PM	ONE HOUR	16:30	18:00	15			
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2023-2029 AM		1.0644
G2	2023-2029 PM		1.0794

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2023 Observed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
Warning	Demand Set Relationship	D8 - 2029 + Committed Development, PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	North Street/East Street/Church Road/Selsfield Road	Crossroads	Two-way	Two-way	Two-way	Two-way		26.26	D

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	26.26	D

Arms

Arms

Arm	Name	Description	Arm type
A	North Street		Major
B	East Street		Minor
C	Selsfield Road		Major
D	Church Road		Minor

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)
A - North Street	7.00			79.4	✓	0.00
C - Selsfield Road	7.00			81.6	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - East Street	One lane	4.56	19	39
D - Church Road	One lane	3.98	31	17

Slope / Intercept / Capacity

Custom Intercept Adjustments

Custom stream intercept adjustment	Stream	Use adjustment	Reason	Direct intercept adjustment (PCU/hr)
2	D-C	✓	Reflect QLS	40

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
A-D	620	-	-	-	-	-	-	0.230	0.328	0.230	-	-	-
B-A	582	0.101	0.256	0.256	-	-	-	0.161	0.366	-	0.256	0.256	0.128
B-C	750	0.110	0.278	-	-	-	-	-	-	-	-	-	-
B-D, nearside lane	582	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
B-D, offside lane	582	0.101	0.256	0.256	-	-	-	0.161	0.366	0.161	-	-	-
C-B	621	0.230	0.230	0.329	-	-	-	-	-	-	-	-	-
D-A	697	-	-	-	-	-	-	0.258	-	0.102	-	-	-
D-B, nearside lane	545	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-B, offside lane	545	0.151	0.151	0.343	-	-	-	0.240	0.240	0.095	-	-	-
D-C	585	-	0.151	0.343	0.120	0.240	0.240	0.240	0.240	0.095	-	-	-

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
D2	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - North Street		ONE HOUR	✓	514	100.000
B - East Street		ONE HOUR	✓	143	100.000
C - Selsfield Road		ONE HOUR	✓	450	100.000
D - Church Road		ONE HOUR	✓	321	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	389	125
	B - East Street	3	0	14	126
	C - Selsfield Road	237	12	0	201
	D - Church Road	52	126	143	0

Vehicle Mix

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

Heavy Vehicle %

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	1	0
	B - East Street	33	0	0	1
	C - Selsfield Road	2	17	0	1
	D - Church Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.44	17.88	0.8	3.6	C	131	197
A-BCD	0.36	7.00	0.9	4.0	A	219	328
A-B						0	0
A-C						253	379
D-ABC	0.96	104.23	9.7	39.4	F	295	442
C-ABD	0.04	5.33	0.1	0.5	A	25	38
C-D						178	267
C-A						210	315

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	108	27	432	0.249	106	0.0	0.3	11.016	B
A-BCD	155	39	744	0.209	154	0.0	0.4	6.097	A
A-B	0	0			0				
A-C	232	58			232				
D-ABC	242	60	439	0.550	237	0.0	1.2	17.421	C
C-ABD	17	4	693	0.025	17	0.0	0.0	5.326	A
C-D	148	37			148				
C-A	174	43			174				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	129	32	401	0.320	128	0.3	0.5	13.148	B
A-BCD	207	52	771	0.268	206	0.4	0.6	6.374	A
A-B	0	0			0				
A-C	256	64			256				
D-ABC	289	72	410	0.704	285	1.2	2.2	27.804	D
C-ABD	24	6	728	0.032	24	0.0	0.0	5.131	A
C-D	175	44			175				
C-A	206	52			206				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	157	39	359	0.438	156	0.5	0.8	17.639	C
A-BCD	294	73	811	0.362	292	0.6	0.9	6.962	A
A-B	0	0			0				
A-C	272	68			272				
D-ABC	353	88	370	0.956	332	2.2	7.4	71.862	F
C-ABD	35	9	778	0.045	35	0.0	0.1	4.864	A
C-D	211	53			211				
C-A	249	62			249				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	157	39	359	0.439	157	0.8	0.8	17.877	C
A-BCD	294	74	811	0.363	294	0.9	0.9	7.001	A
A-B	0	0			0				
A-C	272	68			272				
D-ABC	353	88	369	0.957	345	7.4	9.7	104.232	F
C-ABD	35	9	778	0.045	35	0.1	0.1	4.845	A
C-D	211	53			211				
C-A	249	62			249				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	129	32	400	0.321	130	0.8	0.5	13.351	B
A-BCD	207	52	772	0.268	209	0.9	0.6	6.430	A
A-B	0	0			0				
A-C	255	64			255				
D-ABC	289	72	409	0.705	317	9.7	2.7	46.404	E
C-ABD	24	6	728	0.032	24	0.1	0.0	5.080	A
C-D	175	44			175				
C-A	206	52			206				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	108	27	431	0.250	108	0.5	0.3	11.170	B
A-BCD	156	39	744	0.210	157	0.6	0.4	6.148	A
A-B	0	0			0				
A-C	231	58			231				
D-ABC	242	60	438	0.551	247	2.7	1.3	19.330	C
C-ABD	17	4	693	0.025	17	0.0	0.0	5.300	A
C-D	148	37			148				
C-A	174	43			174				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.33	0.00	0.00	0.33	0.33			N/A	N/A
A-BCD	0.40	0.00	0.00	0.40	0.40			N/A	N/A
D-ABC	1.17	0.56	1.07	1.23	1.62			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.46	0.00	0.00	0.46	0.46			N/A	N/A
A-BCD	0.57	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	2.16	0.09	1.34	4.89	6.77			N/A	N/A
C-ABD	0.04	0.03	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.76	0.03	0.26	0.76	0.76			N/A	N/A
A-BCD	0.94	0.03	0.26	0.94	0.94			N/A	N/A
D-ABC	7.45	0.16	3.53	18.75	26.01			N/A	N/A
C-ABD	0.07	0.03	0.25	0.46	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.77	0.03	0.29	1.41	3.59			N/A	N/A
A-BCD	0.95	0.04	0.38	2.34	3.99			N/A	N/A
D-ABC	9.68	0.11	3.02	26.70	39.39			N/A	N/A
C-ABD	0.07	0.00	0.00	0.07	0.07			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.48	0.04	0.43	1.26	1.38			N/A	N/A
A-BCD	0.60	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	2.67	0.04	0.40	7.19	13.56			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.34	0.03	0.29	0.80	1.15			N/A	N/A
A-BCD	0.41	0.00	0.00	0.41	0.41			N/A	N/A
D-ABC	1.28	0.03	0.30	1.76	6.23			N/A	N/A
C-ABD	0.03	0.00	0.00	0.03	0.03			N/A	N/A

2029 Future Year, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
Warning	Demand Set Relationship	D8 - 2029 + Committed Development, PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	North Street/East Street/Church Road/Selsfield Road	Crossroads	Two-way	Two-way	Two-way	Two-way		51.17	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	51.17	F

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	Relationship type	Relationship
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - North Street		ONE HOUR	✓	555	100.000
B - East Street		ONE HOUR	✓	154	100.000
C - Selsfield Road		ONE HOUR	✓	486	100.000
D - Church Road		ONE HOUR	✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	420	135
	B - East Street	3	0	15	136
	C - Selsfield Road	256	13	0	217
	D - Church Road	56	136	154	0

Vehicle Mix

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

Heavy Vehicle %

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	1	0
	B - East Street	33	0	0	1
	C - Selsfield Road	2	17	0	1
	D - Church Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.50	21.14	1.0	4.4	C	142	212
A-BCD	0.41	7.41	1.2	5.6	A	250	375
A-B						0	0
A-C						259	389
D-ABC	1.09	214.09	23.3	54.8	F	318	477
C-ABD	0.05	5.23	0.1	0.5	A	29	44
C-D						191	287
C-A						225	338

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	116	29	420	0.277	115	0.0	0.4	11.753	B
A-BCD	175	44	755	0.232	173	0.0	0.5	6.182	A
A-B	0	0			0				
A-C	243	61			243				
D-ABC	261	65	428	0.610	255	0.0	1.5	20.226	C
C-ABD	20	5	707	0.028	19	0.0	0.0	5.234	A
C-D	159	40			159				
C-A	187	47			187				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	139	35	386	0.359	138	0.4	0.5	14.455	B
A-BCD	235	59	785	0.299	234	0.5	0.7	6.544	A
A-B	0	0			0				
A-C	264	66			264				
D-ABC	311	78	396	0.787	305	1.5	3.1	37.040	E
C-ABD	27	7	746	0.036	27	0.0	0.1	5.032	A
C-D	188	47			188				
C-A	222	55			222				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	170	42	341	0.499	168	0.5	1.0	20.676	C
A-BCD	339	85	828	0.409	337	0.7	1.2	7.346	A
A-B	0	0			0				
A-C	272	68			272				
D-ABC	381	95	352	1.083	336	3.1	14.5	118.545	F
C-ABD	41	10	801	0.051	41	0.1	0.1	4.759	A
C-D	227	57			227				
C-A	267	67			267				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	170	42	340	0.500	170	1.0	1.0	21.137	C
A-BCD	340	85	829	0.410	340	1.2	1.2	7.409	A
A-B	0	0			0				
A-C	271	68			271				
D-ABC	381	95	351	1.085	346	14.5	23.3	214.086	F
C-ABD	41	10	801	0.051	41	0.1	0.1	4.739	A
C-D	227	57			227				
C-A	267	67			267				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	139	35	385	0.360	140	1.0	0.6	14.809	B
A-BCD	236	59	786	0.300	238	1.2	0.7	6.618	A
A-B	0	0			0				
A-C	263	66			263				
D-ABC	311	78	395	0.789	380	23.3	6.2	152.882	F
C-ABD	27	7	745	0.037	27	0.1	0.1	4.982	A
C-D	188	47			188				
C-A	222	55			222				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	116	29	419	0.278	117	0.6	0.4	11.964	B
A-BCD	176	44	756	0.233	177	0.7	0.5	6.249	A
A-B	0	0			0				
A-C	242	60			242				
D-ABC	261	65	427	0.611	279	6.2	1.7	26.893	D
C-ABD	20	5	707	0.028	20	0.1	0.0	5.211	A
C-D	159	40			159				
C-A	187	47			187				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.38	0.00	0.00	0.38	0.38			N/A	N/A
A-BCD	0.46	0.00	0.00	0.46	0.46			N/A	N/A
D-ABC	1.48	0.42	1.34	2.03	2.63			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.55	0.55	1.00	1.40	1.45			N/A	N/A
A-BCD	0.68	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	3.12	0.10	1.31	7.46	10.34			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.95	0.03	0.27	0.95	1.73			N/A	N/A
A-BCD	1.16	0.03	0.27	1.16	1.16			N/A	N/A
D-ABC	14.46	1.83	11.48	28.11	34.61			N/A	N/A
C-ABD	0.08	0.03	0.26	0.47	0.49			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.98	0.03	0.29	1.46	4.42			N/A	N/A
A-BCD	1.18	0.04	0.36	2.94	5.63			N/A	N/A
D-ABC	23.31	3.63	19.06	44.83	54.79			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.58	0.05	0.54	1.33	1.43			N/A	N/A
A-BCD	0.71	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	6.18	0.07	1.29	17.36	26.56			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.39	0.03	0.35	1.15	1.34			N/A	N/A
A-BCD	0.48	0.00	0.00	0.48	0.48			N/A	N/A
D-ABC	1.67	0.03	0.29	1.67	7.35			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2029 + Committed Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
Warning	Demand Set Relationship	D8 - 2029 + Committed Development, PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	North Street/East Street/Church Road/Selsfield Road	Crossroads	Two-way	Two-way	Two-way	Two-way		51.17	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	51.17	F

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	Relationship type	Relationship
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - North Street		ONE HOUR	✓	555	100.000
B - East Street		ONE HOUR	✓	154	100.000
C - Selsfield Road		ONE HOUR	✓	486	100.000
D - Church Road		ONE HOUR	✓	346	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	420	135
	B - East Street	3	0	15	136
	C - Selsfield Road	256	13	0	217
	D - Church Road	56	136	154	0

Vehicle Mix

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

Heavy Vehicle %

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	1	0
	B - East Street	33	0	0	1
	C - Selsfield Road	2	17	0	1
	D - Church Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.50	21.14	1.0	4.4	C	142	212
A-BCD	0.41	7.41	1.2	5.6	A	250	375
A-B						0	0
A-C						259	389
D-ABC	1.09	214.09	23.3	54.8	F	318	477
C-ABD	0.05	5.23	0.1	0.5	A	29	44
C-D						191	287
C-A						225	338

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	116	29	420	0.277	115	0.0	0.4	11.753	B
A-BCD	175	44	755	0.232	173	0.0	0.5	6.182	A
A-B	0	0			0				
A-C	243	61			243				
D-ABC	261	65	428	0.610	255	0.0	1.5	20.226	C
C-ABD	20	5	707	0.028	19	0.0	0.0	5.234	A
C-D	159	40			159				
C-A	187	47			187				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	139	35	386	0.359	138	0.4	0.5	14.455	B
A-BCD	235	59	785	0.299	234	0.5	0.7	6.544	A
A-B	0	0			0				
A-C	264	66			264				
D-ABC	311	78	396	0.787	305	1.5	3.1	37.040	E
C-ABD	27	7	746	0.036	27	0.0	0.1	5.032	A
C-D	188	47			188				
C-A	222	55			222				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	170	42	341	0.499	168	0.5	1.0	20.676	C
A-BCD	339	85	828	0.409	337	0.7	1.2	7.346	A
A-B	0	0			0				
A-C	272	68			272				
D-ABC	381	95	352	1.083	336	3.1	14.5	118.545	F
C-ABD	41	10	801	0.051	41	0.1	0.1	4.759	A
C-D	227	57			227				
C-A	267	67			267				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	170	42	340	0.500	170	1.0	1.0	21.137	C
A-BCD	340	85	829	0.410	340	1.2	1.2	7.406	A
A-B	0	0			0				
A-C	271	68			271				
D-ABC	381	95	351	1.085	346	14.5	23.3	214.086	F
C-ABD	41	10	801	0.051	41	0.1	0.1	4.741	A
C-D	227	57			227				
C-A	267	67			267				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	139	35	385	0.360	140	1.0	0.6	14.809	B
A-BCD	236	59	786	0.300	238	1.2	0.7	6.618	A
A-B	0	0			0				
A-C	263	66			263				
D-ABC	311	78	395	0.789	380	23.3	6.2	152.882	F
C-ABD	27	7	745	0.037	27	0.1	0.1	4.980	A
C-D	188	47			188				
C-A	222	55			222				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	116	29	419	0.278	117	0.6	0.4	11.962	B
A-BCD	176	44	756	0.233	177	0.7	0.5	6.247	A
A-B	0	0			0				
A-C	242	60			242				
D-ABC	261	65	427	0.611	279	6.2	1.7	26.895	D
C-ABD	20	5	707	0.028	20	0.1	0.0	5.211	A
C-D	159	40			159				
C-A	187	47			187				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.38	0.00	0.00	0.38	0.38			N/A	N/A
A-BCD	0.46	0.00	0.00	0.46	0.46			N/A	N/A
D-ABC	1.48	0.42	1.34	2.03	2.63			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.55	0.55	1.00	1.40	1.45			N/A	N/A
A-BCD	0.68	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	3.12	0.10	1.31	7.46	10.34			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.95	0.03	0.27	0.95	1.73			N/A	N/A
A-BCD	1.16	0.03	0.27	1.16	1.16			N/A	N/A
D-ABC	14.46	1.83	11.48	28.11	34.61			N/A	N/A
C-ABD	0.08	0.03	0.26	0.47	0.49			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.98	0.03	0.29	1.46	4.42			N/A	N/A
A-BCD	1.18	0.04	0.36	2.94	5.63			N/A	N/A
D-ABC	23.31	3.63	19.06	44.83	54.79			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.58	0.05	0.54	1.33	1.43			N/A	N/A
A-BCD	0.71	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	6.18	0.07	1.29	17.36	26.56			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.39	0.03	0.35	1.15	1.34			N/A	N/A
A-BCD	0.48	0.00	0.00	0.48	0.48			N/A	N/A
D-ABC	1.67	0.03	0.29	1.67	7.35			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2029 + Committed Development + Development (350 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
Warning	Demand Set Relationship	D8 - 2029 + Committed Development, PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	North Street/East Street/Church Road/Selsfield Road	Crossroads	Two-way	Two-way	Two-way	Two-way		54.98	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	54.98	F

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	Relationship type	Relationship
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - North Street		ONE HOUR	✓	563	100.000
B - East Street		ONE HOUR	✓	162	100.000
C - Selsfield Road		ONE HOUR	✓	493	100.000
D - Church Road		ONE HOUR	✓	349	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	3	423	136
	B - East Street	11	0	15	136
	C - Selsfield Road	263	13	0	217
	D - Church Road	59	136	154	0

Vehicle Mix

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

Heavy Vehicle %

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	1	0
	B - East Street	10	0	0	1
	C - Selsfield Road	2	17	0	1
	D - Church Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.53	23.09	1.1	5.0	C	148	223
A-BCD	0.42	7.47	1.2	5.9	A	255	383
A-B						2	3
A-C						259	389
D-ABC	1.10	231.99	25.6	57.1	F	320	480
C-ABD	0.05	5.21	0.1	0.5	A	30	45
C-D						191	287
C-A						232	348

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	122	30	416	0.293	120	0.0	0.4	12.112	B
A-BCD	178	44	757	0.235	176	0.0	0.5	6.188	A
A-B	2	0.49			2				
A-C	244	61			244				
D-ABC	263	66	426	0.617	257	0.0	1.5	20.590	C
C-ABD	20	5	711	0.028	20	0.0	0.0	5.211	A
C-D	159	40			159				
C-A	193	48			193				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	145	36	382	0.381	145	0.4	0.6	15.124	C
A-BCD	240	60	788	0.304	239	0.5	0.7	6.565	A
A-B	2	0.53			2				
A-C	264	66			264				
D-ABC	314	78	394	0.797	307	1.5	3.3	38.443	E
C-ABD	28	7	750	0.037	28	0.0	0.1	5.006	A
C-D	188	47			188				
C-A	228	57			228				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	178	45	335	0.532	176	0.6	1.1	22.381	C
A-BCD	346	87	832	0.416	344	0.7	1.2	7.403	A
A-B	2	0.54			2				
A-C	271	68			271				
D-ABC	384	96	349	1.100	335	3.3	15.6	125.847	F
C-ABD	42	10	806	0.052	42	0.1	0.1	4.731	A
C-D	227	57			227				
C-A	275	69			275				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	178	45	334	0.534	178	1.1	1.1	23.089	C
A-BCD	347	87	833	0.417	347	1.2	1.2	7.469	A
A-B	2	0.54			2				
A-C	270	67			270				
D-ABC	384	96	349	1.102	344	15.6	25.6	231.990	F
C-ABD	42	10	806	0.052	42	0.1	0.1	4.713	A
C-D	226	57			226				
C-A	275	69			275				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	145	36	379	0.384	147	1.1	0.6	15.645	C
A-BCD	241	60	789	0.305	243	1.2	0.7	6.640	A
A-B	2	0.53			2				
A-C	263	66			263				
D-ABC	314	78	393	0.799	378	25.6	9.5	175.665	F
C-ABD	28	7	749	0.037	28	0.1	0.1	4.957	A
C-D	188	47			188				
C-A	228	57			228				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	122	30	414	0.294	123	0.6	0.4	12.379	B
A-BCD	179	45	758	0.236	180	0.7	0.5	6.254	A
A-B	2	0.48			2				
A-C	243	61			243				
D-ABC	263	66	425	0.618	294	9.5	1.7	32.865	D
C-ABD	20	5	710	0.028	20	0.1	0.0	5.186	A
C-D	159	40			159				
C-A	193	48			193				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.41	0.00	0.00	0.41	0.41			N/A	N/A
A-BCD	0.47	0.00	0.00	0.47	0.47			N/A	N/A
D-ABC	1.52	0.34	1.36	2.27	2.79			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.60	0.14	0.89	1.38	1.44			N/A	N/A
A-BCD	0.70	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	3.27	0.11	1.39	7.81	10.83			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.08	0.03	0.28	1.08	3.08			N/A	N/A
A-BCD	1.20	0.03	0.27	1.20	1.24			N/A	N/A
D-ABC	15.57	2.42	12.69	29.44	35.87			N/A	N/A
C-ABD	0.08	0.03	0.26	0.47	0.49			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.11	0.03	0.29	1.11	5.00			N/A	N/A
A-BCD	1.22	0.04	0.36	3.03	5.88			N/A	N/A
D-ABC	25.56	5.04	21.59	47.33	57.08			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.64	0.05	0.57	1.05	1.05			N/A	N/A
A-BCD	0.73	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	9.48	0.24	5.08	23.21	31.58			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.42	0.04	0.36	1.23	1.40			N/A	N/A
A-BCD	0.49	0.00	0.00	0.49	0.49			N/A	N/A
D-ABC	1.74	0.03	0.29	1.74	7.58			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2029 + Committed Development + Development (450 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue Variations cannot be calculated for crossroads.
Warning	Demand Set Relationship	D8 - 2029 + Committed Development, PM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Arm D Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	North Street/East Street/Church Road/Selsfield Road	Crossroads	Two-way	Two-way	Two-way	Two-way		56.10	F

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	56.10	F

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	Relationship type	Relationship
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - North Street		ONE HOUR	✓	565	100.000
B - East Street		ONE HOUR	✓	164	100.000
C - Selsfield Road		ONE HOUR	✓	495	100.000
D - Church Road		ONE HOUR	✓	350	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	4	424	136
	B - East Street	13	0	15	136
	C - Selsfield Road	265	13	0	217
	D - Church Road	59	136	154	0

Vehicle Mix

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

Heavy Vehicle %

		To			
		A - North Street	B - East Street	C - Selsfield Road	D - Church Road
From	A - North Street	0	0	1	0
	B - East Street	8	0	0	1
	C - Selsfield Road	2	17	0	1
	D - Church Road	0	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-ACD	0.54	23.71	1.2	5.2	C	150	226
A-BCD	0.42	7.49	1.2	6.0	A	257	385
A-B						3	4
A-C						259	389
D-ABC	1.11	237.29	26.2	57.7	F	321	481
C-ABD	0.05	5.20	0.1	0.5	A	30	45
C-D						191	287
C-A						234	351

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	123	31	415	0.298	122	0.0	0.4	12.219	B
A-BCD	179	45	758	0.236	177	0.0	0.5	6.190	A
A-B	3	0.63			3				
A-C	244	61			244				
D-ABC	263	66	426	0.619	257	0.0	1.5	20.697	C
C-ABD	20	5	711	0.028	20	0.0	0.0	5.205	A
C-D	159	40			159				
C-A	194	49			194				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	147	37	381	0.387	147	0.4	0.6	15.326	C
A-BCD	241	60	789	0.305	240	0.5	0.7	6.568	A
A-B	3	0.68			3				
A-C	264	66			264				
D-ABC	314	79	393	0.799	307	1.5	3.3	38.859	E
C-ABD	28	7	751	0.037	28	0.0	0.1	4.999	A
C-D	188	47			188				
C-A	230	57			230				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	334	0.541	179	0.6	1.1	22.915	C
A-BCD	349	87	834	0.418	347	0.7	1.2	7.419	A
A-B	3	0.69			3				
A-C	271	68			271				
D-ABC	385	96	349	1.105	335	3.3	15.9	128.008	F
C-ABD	42	10	808	0.052	42	0.1	0.1	4.723	A
C-D	226	57			226				
C-A	277	69			277				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	181	45	332	0.544	180	1.1	1.2	23.709	C
A-BCD	350	87	835	0.419	350	1.2	1.2	7.487	A
A-B	3	0.69			3				
A-C	269	67			269				
D-ABC	385	96	348	1.107	344	15.9	26.2	237.287	F
C-ABD	42	10	807	0.052	42	0.1	0.1	4.706	A
C-D	226	57			226				
C-A	277	69			277				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	147	37	378	0.390	149	1.2	0.7	15.906	C
A-BCD	242	61	790	0.306	244	1.2	0.7	6.644	A
A-B	3	0.67			3				
A-C	263	66			263				
D-ABC	314	79	392	0.801	378	26.2	10.4	182.512	F
C-ABD	28	7	751	0.037	28	0.1	0.1	4.949	A
C-D	188	47			188				
C-A	230	57			230				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-ACD	123	31	413	0.299	124	0.7	0.4	12.504	B
A-BCD	180	45	759	0.237	181	0.7	0.5	6.256	A
A-B	2	0.62			2				
A-C	243	61			243				
D-ABC	263	66	425	0.620	298	10.4	1.8	34.843	D
C-ABD	20	5	711	0.028	20	0.1	0.0	5.179	A
C-D	159	40			159				
C-A	194	49			194				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.42	0.00	0.00	0.42	0.42			N/A	N/A
A-BCD	0.48	0.00	0.00	0.48	0.48			N/A	N/A
D-ABC	1.53	0.32	1.37	2.33	2.83			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.62	0.15	0.90	1.38	1.44			N/A	N/A
A-BCD	0.71	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	3.31	0.11	1.42	7.91	10.96			N/A	N/A
C-ABD	0.05	0.03	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.12	0.03	0.28	1.12	3.54			N/A	N/A
A-BCD	1.22	0.03	0.27	1.22	1.28			N/A	N/A
D-ABC	15.89	2.61	13.05	29.84	36.27			N/A	N/A
C-ABD	0.08	0.03	0.26	0.47	0.49			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	1.16	0.03	0.29	1.16	5.22			N/A	N/A
A-BCD	1.24	0.04	0.36	3.07	5.95			N/A	N/A
D-ABC	26.23	5.46	22.32	48.03	57.71			N/A	N/A
C-ABD	0.08	0.00	0.00	0.08	0.08			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.66	0.05	0.58	1.27	1.27			N/A	N/A
A-BCD	0.74	0.55	1.00	1.40	1.45			N/A	N/A
D-ABC	10.36	0.35	6.12	24.50	32.72			N/A	N/A
C-ABD	0.05	0.00	0.00	0.05	0.05			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-ACD	0.43	0.04	0.37	1.26	1.43			N/A	N/A
A-BCD	0.50	0.00	0.00	0.50	0.50			N/A	N/A
D-ABC	1.75	0.03	0.29	1.75	7.65			N/A	N/A
C-ABD	0.04	0.00	0.00	0.04	0.04			N/A	N/A

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.1.0.1820
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Filename: Northern Site Access.j10
Path: T:\Projects\9000 Series Project Numbers\9155ITB Wychwood, Turners Hill Rd, Crawley Down\Tech\Assessments\Picady\2024
Report generation date: 08/03/2024 09:59:31

»2023 Observed, AM
»2023 Observed, PM
»2029 Future Year, AM
»2029 Future Year, PM
»2029 + Committed Development, AM
»2029 + Committed Development, PM
»2029 + Committed Development + Development (350 Homes), AM
»2029 + Committed Development + Development (350 Homes), PM
»2029 + Committed Development + Development (450 Homes), AM
»2029 + Committed Development + Development (450 Homes), PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
	2023 Observed					
Stream B-AC	0.1	10.66	0.06	0.0	8.81	0.02
Stream C-AB	0.0	6.00	0.01	0.0	3.92	0.02
	2029 Future Year					
Stream B-AC	0.1	11.20	0.07	0.0	9.22	0.03
Stream C-AB	0.0	5.88	0.01	0.0	3.82	0.03
	2029 + Committed Development					
Stream B-AC	0.1	11.20	0.07	0.0	9.22	0.03
Stream C-AB	0.0	5.88	0.01	0.0	3.82	0.03
	2029 + Committed Development + Development (350 Homes)					
Stream B-AC	0.3	12.81	0.21	0.1	9.75	0.08
Stream C-AB	0.1	5.10	0.06	0.6	4.00	0.18
	2029 + Committed Development + Development (450 Homes)					
Stream B-AC	0.3	13.58	0.25	0.1	10.03	0.09
Stream C-AB	0.1	5.10	0.07	0.9	4.06	0.23

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

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

File summary

File Description

Title	
Location	
Site number	
Date	20/02/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\basingstoke.hotdesk
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use 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	Relationship type	Relationship
D1	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓		
D2	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓		
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2
D5	Committed Development	AM	ONE HOUR	07:00	08:30	15			
D6	Committed Development	PM	ONE HOUR	16:30	18:00	15			
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6
D9	Development 350 Homes	AM	ONE HOUR	07:00	08:30	15			
D10	Development 350 Homes	PM	ONE HOUR	16:30	18:00	15			
D11	Development 450 Homes	AM	ONE HOUR	07:00	08:30	15			
D12	Development 450 Homes	PM	ONE HOUR	16:30	18:00	15			
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2023-2029 AM		1.0644
G2	2023-2029 PM		1.0794

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2023 Observed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Northern Site Access	T-Junction	Two-way	Two-way	Two-way		0.24	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.24	A

Arms

Arms

Arm	Name	Description	Arm type
A	Turners Hill Road (S)		Major
B	Wychwood Place		Minor
C	Turners Hill 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 - Turners Hill Road (N)	6.00			107.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Wychwood Place	One lane	3.00	55	57

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	524	0.095	0.241	0.152	0.344
B-C	660	0.101	0.256	-	-
C-B	636	0.246	0.246	-	-

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	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (S)		ONE HOUR	✓	599	100.000
B - Wychwood Place		ONE HOUR	✓	20	100.000
C - Turners Hill Road (N)		ONE HOUR	✓	432	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	4	595
	B - Wychwood Place	7	0	13
	C - Turners Hill Road (N)	430	2	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	0	6
	B - Wychwood Place	14	0	0
	C - Turners Hill Road (N)	6	50	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.06	10.66	0.1	0.5	B	18	28
C-AB	0.01	6.00	0.0	0.5	A	5	7
C-A						392	587
A-B						4	6
A-C						546	819

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	429	0.035	15	0.0	0.0	8.681	A
C-AB	3	1	603	0.005	3	0.0	0.0	5.998	A
C-A	322	80			322				
A-B	3	0.75			3				
A-C	448	112			448				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	4	401	0.045	18	0.0	0.0	9.407	A
C-AB	5	1	642	0.007	5	0.0	0.0	5.704	A
C-A	384	96			384				
A-B	4	0.90			4				
A-C	535	134			535				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	360	0.061	22	0.0	0.1	10.661	B
C-AB	7	2	697	0.010	7	0.0	0.0	5.277	A
C-A	469	117			469				
A-B	4	1			4				
A-C	655	164			655				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	6	360	0.061	22	0.1	0.1	10.665	B
C-AB	7	2	697	0.010	7	0.0	0.0	5.220	A
C-A	469	117			469				
A-B	4	1			4				
A-C	655	164			655				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	18	4	401	0.045	18	0.1	0.0	9.413	A
C-AB	5	1	642	0.007	5	0.0	0.0	5.554	A
C-A	384	96			384				
A-B	4	0.90			4				
A-C	535	134			535				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	15	4	429	0.035	15	0.0	0.0	8.690	A
C-AB	3	1	604	0.005	3	0.0	0.0	5.916	A
C-A	322	80			322				
A-B	3	0.75			3				
A-C	448	112			448				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2023 Observed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Northern Site Access	T-Junction	Two-way	Two-way	Two-way		0.13	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.13	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	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (S)		ONE HOUR	✓	407	100.000
B - Wychwood Place		ONE HOUR	✓	9	100.000
C - Turners Hill Road (N)		ONE HOUR	✓	731	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	10	397
	B - Wychwood Place	3	0	6
	C - Turners Hill Road (N)	725	6	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	0	4
	B - Wychwood Place	0	0	0
	C - Turners Hill Road (N)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.02	8.81	0.0	0.5	A	8	12
C-AB	0.02	3.92	0.0	0.5	A	17	26
C-A						654	980
A-B						9	14
A-C						364	546

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	2	483	0.014	7	0.0	0.0	7.560	A
C-AB	11	3	931	0.012	11	0.0	0.0	3.912	A
C-A	539	135			539				
A-B	8	2			8				
A-C	299	75			299				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	457	0.018	8	0.0	0.0	8.026	A
C-AB	16	4	994	0.016	16	0.0	0.0	3.677	A
C-A	641	160			641				
A-B	9	2			9				
A-C	357	89			357				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	2	419	0.024	10	0.0	0.0	8.809	A
C-AB	25	6	1084	0.023	25	0.0	0.0	3.397	A
C-A	780	195			780				
A-B	11	3			11				
A-C	437	109			437				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	10	2	419	0.024	10	0.0	0.0	8.810	A
C-AB	25	6	1084	0.023	25	0.0	0.0	3.400	A
C-A	780	195			780				
A-B	11	3			11				
A-C	437	109			437				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	8	2	457	0.018	8	0.0	0.0	8.029	A
C-AB	16	4	994	0.016	16	0.0	0.0	3.683	A
C-A	641	160			641				
A-B	9	2			9				
A-C	357	89			357				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	2	483	0.014	7	0.0	0.0	7.561	A
C-AB	11	3	931	0.012	11	0.0	0.0	3.916	A
C-A	539	135			539				
A-B	8	2			8				
A-C	299	75			299				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.01	0.00	0.00	0.01	0.01			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2029 Future Year, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Northern Site Access	T-Junction	Two-way	Two-way	Two-way		0.25	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.25	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	Relationship type	Relationship
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (S)		ONE HOUR	✓	638	100.000
B - Wychwood Place		ONE HOUR	✓	21	100.000
C - Turners Hill Road (N)		ONE HOUR	✓	460	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	4	633
	B - Wychwood Place	7	0	14
	C - Turners Hill Road (N)	458	2	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	0	6
	B - Wychwood Place	14	0	0
	C - Turners Hill Road (N)	6	50	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.07	11.20	0.1	0.5	B	20	29
C-AB	0.01	5.88	0.0	0.5	A	6	8
C-A						416	625
A-B						4	6
A-C						581	872

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	16	4	420	0.038	16	0.0	0.0	8.909	A
C-AB	4	1	616	0.006	4	0.0	0.0	5.879	A
C-A	343	86			343				
A-B	3	0.80			3				
A-C	477	119			477				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	5	389	0.049	19	0.0	0.1	9.732	A
C-AB	5	1	657	0.008	5	0.0	0.0	5.574	A
C-A	408	102			408				
A-B	4	0.96			4				
A-C	569	142			569				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	345	0.068	23	0.1	0.1	11.197	B
C-AB	8	2	716	0.011	8	0.0	0.0	5.138	A
C-A	498	125			498				
A-B	5	1			5				
A-C	697	174			697				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	345	0.068	23	0.1	0.1	11.201	B
C-AB	8	2	717	0.011	8	0.0	0.0	5.080	A
C-A	498	125			498				
A-B	5	1			5				
A-C	697	174			697				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	5	389	0.049	19	0.1	0.1	9.740	A
C-AB	5	1	658	0.008	5	0.0	0.0	5.426	A
C-A	408	102			408				
A-B	4	0.96			4				
A-C	569	142			569				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	16	4	420	0.038	16	0.1	0.0	8.914	A
C-AB	4	1	616	0.006	4	0.0	0.0	5.794	A
C-A	343	86			343				
A-B	3	0.80			3				
A-C	477	119			477				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2029 Future Year, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Northern Site Access	T-Junction	Two-way	Two-way	Two-way		0.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.14	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	Relationship type	Relationship
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (S)		ONE HOUR	✓	439	100.000
B - Wychwood Place		ONE HOUR	✓	10	100.000
C - Turners Hill Road (N)		ONE HOUR	✓	789	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	11	429
	B - Wychwood Place	3	0	6
	C - Turners Hill Road (N)	783	6	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	0	4
	B - Wychwood Place	0	0	0
	C - Turners Hill Road (N)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.03	9.22	0.0	0.5	A	9	13
C-AB	0.03	3.82	0.0	0.5	A	21	31
C-A						703	1055
A-B						10	15
A-C						393	590

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	2	472	0.015	7	0.0	0.0	7.741	A
C-AB	13	3	956	0.013	13	0.0	0.0	3.813	A
C-A	581	145			581				
A-B	8	2			8				
A-C	323	81			323				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	2	443	0.020	9	0.0	0.0	8.282	A
C-AB	19	5	1025	0.018	19	0.0	0.0	3.573	A
C-A	691	173			691				
A-B	10	2			10				
A-C	385	96			385				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	3	401	0.027	11	0.0	0.0	9.216	A
C-AB	31	8	1124	0.027	31	0.0	0.0	3.290	A
C-A	838	210			838				
A-B	12	3			12				
A-C	472	118			472				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	3	401	0.027	11	0.0	0.0	9.216	A
C-AB	31	8	1124	0.027	31	0.0	0.0	3.292	A
C-A	838	210			838				
A-B	12	3			12				
A-C	472	118			472				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	2	443	0.020	9	0.0	0.0	8.284	A
C-AB	19	5	1025	0.018	19	0.0	0.0	3.582	A
C-A	691	173			691				
A-B	10	2			10				
A-C	385	96			385				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	2	472	0.015	7	0.0	0.0	7.745	A
C-AB	13	3	956	0.013	13	0.0	0.0	3.820	A
C-A	581	145			581				
A-B	8	2			8				
A-C	323	81			323				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2029 + Committed Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Northern Site Access	T-Junction	Two-way	Two-way	Two-way		0.25	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.25	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	Relationship type	Relationship
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (S)		ONE HOUR	✓	638	100.000
B - Wychwood Place		ONE HOUR	✓	21	100.000
C - Turners Hill Road (N)		ONE HOUR	✓	460	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	4	633
	B - Wychwood Place	7	0	14
	C - Turners Hill Road (N)	458	2	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	0	6
	B - Wychwood Place	14	0	0
	C - Turners Hill Road (N)	6	50	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.07	11.20	0.1	0.5	B	20	29
C-AB	0.01	5.88	0.0	0.5	A	6	8
C-A						416	625
A-B						4	6
A-C						581	872

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	16	4	420	0.038	16	0.0	0.0	8.909	A
C-AB	4	1	616	0.006	4	0.0	0.0	5.879	A
C-A	343	86			343				
A-B	3	0.80			3				
A-C	477	119			477				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	5	389	0.049	19	0.0	0.1	9.732	A
C-AB	5	1	657	0.008	5	0.0	0.0	5.574	A
C-A	408	102			408				
A-B	4	0.96			4				
A-C	569	142			569				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	345	0.068	23	0.1	0.1	11.197	B
C-AB	8	2	716	0.011	8	0.0	0.0	5.138	A
C-A	498	125			498				
A-B	5	1			5				
A-C	697	174			697				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	23	6	345	0.068	23	0.1	0.1	11.201	B
C-AB	8	2	717	0.011	8	0.0	0.0	5.080	A
C-A	498	125			498				
A-B	5	1			5				
A-C	697	174			697				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	19	5	389	0.049	19	0.1	0.1	9.738	A
C-AB	5	1	658	0.008	5	0.0	0.0	5.426	A
C-A	408	102			408				
A-B	4	0.96			4				
A-C	569	142			569				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	16	4	420	0.038	16	0.1	0.0	8.916	A
C-AB	4	1	616	0.006	4	0.0	0.0	5.794	A
C-A	343	86			343				
A-B	3	0.80			3				
A-C	477	119			477				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.04	0.00	0.00	0.04	0.04			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2029 + Committed Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Northern Site Access	T-Junction	Two-way	Two-way	Two-way		0.14	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.14	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	Relationship type	Relationship
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (S)		ONE HOUR	✓	439	100.000
B - Wychwood Place		ONE HOUR	✓	10	100.000
C - Turners Hill Road (N)		ONE HOUR	✓	789	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	11	429
	B - Wychwood Place	3	0	6
	C - Turners Hill Road (N)	783	6	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	0	4
	B - Wychwood Place	0	0	0
	C - Turners Hill Road (N)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.03	9.22	0.0	0.5	A	9	13
C-AB	0.03	3.82	0.0	0.5	A	21	31
C-A						703	1055
A-B						10	15
A-C						393	590

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	2	472	0.015	7	0.0	0.0	7.741	A
C-AB	13	3	956	0.013	13	0.0	0.0	3.813	A
C-A	581	145			581				
A-B	8	2			8				
A-C	323	81			323				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	2	443	0.020	9	0.0	0.0	8.282	A
C-AB	19	5	1025	0.018	19	0.0	0.0	3.573	A
C-A	691	173			691				
A-B	10	2			10				
A-C	385	96			385				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	3	401	0.027	11	0.0	0.0	9.216	A
C-AB	31	8	1124	0.027	31	0.0	0.0	3.290	A
C-A	838	210			838				
A-B	12	3			12				
A-C	472	118			472				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	11	3	401	0.027	11	0.0	0.0	9.216	A
C-AB	31	8	1124	0.027	31	0.0	0.0	3.295	A
C-A	838	210			838				
A-B	12	3			12				
A-C	472	118			472				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	9	2	443	0.020	9	0.0	0.0	8.284	A
C-AB	19	5	1025	0.018	19	0.0	0.0	3.582	A
C-A	691	173			691				
A-B	10	2			10				
A-C	385	96			385				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	7	2	472	0.015	7	0.0	0.0	7.743	A
C-AB	13	3	956	0.013	13	0.0	0.0	3.817	A
C-A	581	145			581				
A-B	8	2			8				
A-C	323	81			323				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.02	0.25	0.45	0.48			N/A	N/A
C-AB	0.02	0.02	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.03	0.00	0.00	0.03	0.03			N/A	N/A
C-AB	0.03	0.00	0.00	0.03	0.03			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.02	0.00	0.00	0.02	0.02			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

2029 + Committed Development + Development (350 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Northern Site Access	T-Junction	Two-way	Two-way	Two-way		0.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.79	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	Relationship type	Relationship
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (S)		ONE HOUR	✓	712	100.000
B - Wychwood Place		ONE HOUR	✓	66	100.000
C - Turners Hill Road (N)		ONE HOUR	✓	496	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	8	704
	B - Wychwood Place	17	0	49
	C - Turners Hill Road (N)	482	14	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	0	5
	B - Wychwood Place	6	0	0
	C - Turners Hill Road (N)	6	7	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.21	12.81	0.3	1.2	B	61	91
C-AB	0.06	5.10	0.1	0.5	A	32	49
C-A						423	634
A-B						7	10
A-C						646	969

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	12	438	0.114	49	0.0	0.1	9.246	A
C-AB	21	5	727	0.029	21	0.0	0.0	5.104	A
C-A	352	88			352				
A-B	6	1			6				
A-C	530	133			530				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	404	0.148	59	0.1	0.2	10.450	B
C-AB	30	7	759	0.039	30	0.0	0.1	4.938	A
C-A	416	104			416				
A-B	7	2			7				
A-C	633	158			633				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	354	0.206	73	0.2	0.3	12.778	B
C-AB	46	11	808	0.057	46	0.1	0.1	4.727	A
C-A	500	125			500				
A-B	8	2			8				
A-C	775	194			775				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	73	18	354	0.206	73	0.3	0.3	12.809	B
C-AB	46	11	808	0.057	46	0.1	0.1	4.727	A
C-A	500	125			500				
A-B	8	2			8				
A-C	775	194			775				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	404	0.148	60	0.3	0.2	10.483	B
C-AB	30	7	759	0.039	30	0.1	0.1	4.935	A
C-A	416	104			416				
A-B	7	2			7				
A-C	633	158			633				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	50	12	438	0.114	50	0.2	0.1	9.281	A
C-AB	21	5	727	0.030	22	0.1	0.0	5.104	A
C-A	352	88			352				
A-B	6	1			6				
A-C	530	133			530				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.17	0.00	0.00	0.17	0.17			N/A	N/A
C-AB	0.06	0.03	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.09	0.03	0.26	0.47	0.50			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.03	0.30	0.88	1.21			N/A	N/A
C-AB	0.09	0.00	0.00	0.09	0.09			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.06	0.00	0.00	0.06	0.06			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.04	0.00	0.00	0.04	0.04			N/A	N/A

2029 + Committed Development + Development (350 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Northern Site Access	T-Junction	Two-way	Two-way	Two-way		0.63	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.63	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	Relationship type	Relationship
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (S)		ONE HOUR	✓	477	100.000
B - Wychwood Place		ONE HOUR	✓	29	100.000
C - Turners Hill Road (N)		ONE HOUR	✓	886	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	20	458
	B - Wychwood Place	7	0	21
	C - Turners Hill Road (N)	847	39	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	0	4
	B - Wychwood Place	0	0	0
	C - Turners Hill Road (N)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.08	9.75	0.1	0.5	A	26	40
C-AB	0.18	4.00	0.6	2.0	A	140	211
C-A						673	1009
A-B						18	27
A-C						420	630

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	479	0.045	21	0.0	0.0	7.870	A
C-AB	83	21	986	0.084	82	0.0	0.2	3.984	A
C-A	584	146			584				
A-B	15	4			15				
A-C	345	86			345				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	6	448	0.058	26	0.0	0.1	8.533	A
C-AB	124	31	1062	0.117	124	0.2	0.3	3.839	A
C-A	672	168			672				
A-B	18	4			18				
A-C	412	103			412				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	401	0.079	32	0.1	0.1	9.740	A
C-AB	213	53	1170	0.182	211	0.3	0.6	3.757	A
C-A	763	191			763				
A-B	21	5			21				
A-C	504	126			504				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	32	8	401	0.079	32	0.1	0.1	9.748	A
C-AB	214	53	1171	0.182	214	0.6	0.6	3.772	A
C-A	762	191			762				
A-B	21	5			21				
A-C	504	126			504				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	26	6	447	0.058	26	0.1	0.1	8.544	A
C-AB	125	31	1063	0.118	126	0.6	0.3	3.860	A
C-A	672	168			672				
A-B	18	4			18				
A-C	412	103			412				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	22	5	479	0.045	22	0.1	0.0	7.881	A
C-AB	84	21	986	0.085	84	0.3	0.2	3.997	A
C-A	584	146			584				
A-B	15	4			15				
A-C	345	86			345				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.27	0.00	0.00	0.27	0.27			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.08	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.57	0.03	0.28	0.57	1.99			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.09	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.58	0.55	1.00	1.40	1.45			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.28	0.00	0.00	0.28	0.28			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.05	0.00	0.00	0.05	0.05			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

2029 + Committed Development + Development (450 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Northern Site Access	T-Junction	Two-way	Two-way	Two-way		0.96	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.96	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	Relationship type	Relationship
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (S)		ONE HOUR	✓	733	100.000
B - Wychwood Place		ONE HOUR	✓	79	100.000
C - Turners Hill Road (N)		ONE HOUR	✓	507	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	8	725
	B - Wychwood Place	19	0	60
	C - Turners Hill Road (N)	489	18	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	0	5
	B - Wychwood Place	5	0	0
	C - Turners Hill Road (N)	6	6	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.25	13.58	0.3	1.4	B	73	109
C-AB	0.07	5.10	0.1	0.8	A	41	61
C-A						424	636
A-B						8	12
A-C						665	997

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	439	0.136	59	0.0	0.2	9.463	A
C-AB	27	7	733	0.037	27	0.0	0.0	5.098	A
C-A	355	89			355				
A-B	6	2			6				
A-C	546	136			546				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	403	0.177	71	0.2	0.2	10.821	B
C-AB	37	9	765	0.049	37	0.0	0.1	4.947	A
C-A	418	104			418				
A-B	8	2			8				
A-C	651	163			651				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22	352	0.248	87	0.2	0.3	13.533	B
C-AB	58	14	814	0.071	58	0.1	0.1	4.762	A
C-A	500	125			500				
A-B	9	2			9				
A-C	798	199			798				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	87	22	352	0.248	87	0.3	0.3	13.580	B
C-AB	58	14	814	0.071	58	0.1	0.1	4.765	A
C-A	500	125			500				
A-B	9	2			9				
A-C	798	199			798				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	71	18	403	0.177	72	0.3	0.2	10.865	B
C-AB	38	9	765	0.049	38	0.1	0.1	4.949	A
C-A	418	104			418				
A-B	8	2			8				
A-C	651	163			651				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	60	15	439	0.136	60	0.2	0.2	9.505	A
C-AB	27	7	733	0.037	27	0.1	0.1	5.103	A
C-A	354	89			354				
A-B	6	2			6				
A-C	546	136			546				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.07	0.03	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.12	0.03	0.27	0.48	0.83			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.33	0.03	0.31	1.14	1.44			N/A	N/A
C-AB	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.22	0.00	0.00	0.22	0.22			N/A	N/A
C-AB	0.08	0.00	0.00	0.08	0.08			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.16	0.00	0.00	0.16	0.16			N/A	N/A
C-AB	0.05	0.00	0.00	0.05	0.05			N/A	N/A

2029 + Committed Development + Development (450 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Northern Site Access	T-Junction	Two-way	Two-way	Two-way		0.78	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.78	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	Relationship type	Relationship
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (S)		ONE HOUR	✓	488	100.000
B - Wychwood Place		ONE HOUR	✓	34	100.000
C - Turners Hill Road (N)		ONE HOUR	✓	914	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	22	466
	B - Wychwood Place	8	0	25
	C - Turners Hill Road (N)	866	48	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (S)	B - Wychwood Place	C - Turners Hill Road (N)
From	A - Turners Hill Road (S)	0	0	4
	B - Wychwood Place	0	0	0
	C - Turners Hill Road (N)	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.09	10.03	0.1	0.5	B	31	46
C-AB	0.23	4.06	0.9	2.9	A	180	270
C-A						658	988
A-B						20	30
A-C						428	642

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	25	6	477	0.053	25	0.0	0.1	7.968	A
C-AB	105	26	994	0.106	104	0.0	0.2	4.046	A
C-A	583	146			583				
A-B	17	4			17				
A-C	351	88			351				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	30	8	445	0.068	30	0.1	0.1	8.688	A
C-AB	159	40	1072	0.148	158	0.2	0.4	3.941	A
C-A	663	166			663				
A-B	20	5			20				
A-C	419	105			419				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	9	396	0.094	37	0.1	0.1	10.022	B
C-AB	275	69	1184	0.232	273	0.4	0.9	3.960	A
C-A	731	183			731				
A-B	24	6			24				
A-C	513	128			513				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	37	9	396	0.094	37	0.1	0.1	10.035	B
C-AB	276	69	1185	0.233	276	0.9	0.9	3.980	A
C-A	730	182			730				
A-B	24	6			24				
A-C	513	128			513				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	30	8	444	0.068	30	0.1	0.1	8.702	A
C-AB	160	40	1074	0.149	162	0.9	0.4	3.969	A
C-A	661	165			661				
A-B	20	5			20				
A-C	419	105			419				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	25	6	476	0.053	25	0.1	0.1	7.982	A
C-AB	106	27	995	0.107	107	0.4	0.2	4.064	A
C-A	582	145			582				
A-B	17	4			17				
A-C	351	88			351				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.40	0.00	0.00	0.40	0.40			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.88	0.03	0.28	0.88	2.90			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.10	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.89	0.52	0.99	1.41	1.46			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.07	0.00	0.00	0.07	0.07			N/A	N/A
C-AB	0.42	0.00	0.00	0.42	0.42			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.06	0.00	0.00	0.06	0.06			N/A	N/A
C-AB	0.24	0.00	0.00	0.24	0.24			N/A	N/A

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.1.0.1820
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Filename: Sandy Lane_Hophurst Lane_Vicarage Road.j10
Path: T:\Projects\9000 Series Project Numbers\9155ITB Wychwood, Turners Hill Rd, Crawley Down\Tech\Assessments\Picady\2024
Report generation date: 08/03/2024 10:02:46

»2023 Observed, AM
»2023 Observed, PM
»2029 Future Year, AM
»2029 Future Year, PM
»2029 + Committed Development, AM
»2029 + Committed Development, PM
»2029 + Committed Development + Development (350 Homes), AM
»2029 + Committed Development + Development (350 Homes), PM
»2029 + Committed Development + Development (450 Homes), AM
»2029 + Committed Development + Development (450 Homes), PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
	2023 Observed					
Stream B-AC	0.2	8.78	0.20	0.6	9.21	0.36
Stream C-AB	0.3	6.27	0.20	0.3	6.45	0.20
	2029 Future Year					
Stream B-AC	0.2	7.69	0.19	0.6	9.76	0.39
Stream C-AB	0.3	6.18	0.21	0.3	6.60	0.22
	2029 + Committed Development					
Stream B-AC	0.2	7.69	0.19	0.6	9.76	0.39
Stream C-AB	0.3	6.18	0.21	0.3	6.60	0.22
	2029 + Committed Development + Development (350 Homes)					
Stream B-AC	0.2	7.82	0.20	0.6	9.85	0.39
Stream C-AB	0.3	6.19	0.21	0.3	6.61	0.22
	2029 + Committed Development + Development (450 Homes)					
Stream B-AC	0.2	7.86	0.20	0.6	9.87	0.39
Stream C-AB	0.3	6.19	0.21	0.3	6.62	0.22

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

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

File summary

File Description

Title	
Location	
Site number	
Date	22/02/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\basingstoke.hotdesk
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use 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	Relationship type	Relationship
D1	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓		
D2	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓		
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2
D5	Committed Development	AM	ONE HOUR	07:00	08:30	15			
D6	Committed Development	PM	ONE HOUR	16:30	18:00	15			
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6
D9	Development 350 Homes	AM	ONE HOUR	07:00	08:30	15			
D10	Development 350 Homes	PM	ONE HOUR	16:30	18:00	15			
D11	Development 450 Homes	AM	ONE HOUR	07:00	08:30	15			
D12	Development 450 Homes	PM	ONE HOUR	16:30	18:00	15			
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2023-2029 AM		1.0644
G2			1.0794

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2023 Observed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		4.49	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.49	A

Arms

Arms

Arm	Name	Description	Arm type
A	Vicarage Road		Major
B	Sandy Lane		Minor
C	Hophurst Lane		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 - Hophurst Lane	6.25			230.4	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Sandy Lane	One lane	4.58	56	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	591	0.106	0.269	0.169	0.385
B-C	744	0.113	0.285	-	-
C-B	707	0.271	0.271	-	-

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	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	80	100.000
B - Sandy Lane		ONE HOUR	✓	93	100.000
C - Hophurst Lane		ONE HOUR	✓	192	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	29	51
	B - Sandy Lane	54	0	39
	C - Hophurst Lane	76	116	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	17	6
	B - Sandy Lane	13	0	13
	C - Hophurst Lane	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	8.78	0.2	1.2	A	85	128
C-AB	0.20	6.27	0.3	1.2	A	118	178
C-A						58	87
A-B						27	40
A-C						47	70

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	18	532	0.132	69	0.0	0.2	7.772	A
C-AB	95	24	711	0.134	94	0.0	0.2	5.831	A
C-A	50	12			50				
A-B	22	5			22				
A-C	38	10			38				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	524	0.160	83	0.1	0.2	8.174	A
C-AB	115	29	715	0.161	115	0.2	0.2	6.007	A
C-A	57	14			57				
A-B	26	7			26				
A-C	46	11			46				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	102	26	512	0.200	102	0.2	0.2	8.769	A
C-AB	145	36	720	0.201	144	0.2	0.3	6.258	A
C-A	67	17			67				
A-B	32	8			32				
A-C	56	14			56				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	102	26	512	0.200	102	0.2	0.2	8.781	A
C-AB	145	36	720	0.201	145	0.3	0.3	6.265	A
C-A	67	17			67				
A-B	32	8			32				
A-C	56	14			56				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	524	0.160	84	0.2	0.2	8.189	A
C-AB	115	29	715	0.162	116	0.3	0.2	6.015	A
C-A	57	14			57				
A-B	26	7			26				
A-C	46	11			46				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	18	532	0.132	70	0.2	0.2	7.802	A
C-AB	95	24	711	0.134	95	0.2	0.2	5.848	A
C-A	50	12			50				
A-B	22	5			22				
A-C	38	10			38				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.28	0.03	0.26	0.46	0.49			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.03	0.29	0.83	1.19			N/A	N/A
C-AB	0.28	0.03	0.30	0.88	1.20			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

2023 Observed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		5.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.77	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	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	104	100.000
B - Sandy Lane		ONE HOUR	✓	198	100.000
C - Hophurst Lane		ONE HOUR	✓	158	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	33	71
	B - Sandy Lane	73	0	125
	C - Hophurst Lane	36	122	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	6	0
	B - Sandy Lane	5	0	0
	C - Hophurst Lane	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.36	9.21	0.6	2.6	A	182	273
C-AB	0.20	6.45	0.3	1.2	A	118	177
C-A						27	41
A-B						30	45
A-C						65	98

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	149	37	627	0.238	148	0.0	0.3	7.489	A
C-AB	96	24	703	0.136	95	0.0	0.2	5.918	A
C-A	23	6			23				
A-B	25	6			25				
A-C	53	13			53				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	178	44	619	0.287	178	0.3	0.4	8.141	A
C-AB	115	29	702	0.164	115	0.2	0.2	6.133	A
C-A	27	7			27				
A-B	30	7			30				
A-C	64	16			64				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	218	55	609	0.358	217	0.4	0.5	9.183	A
C-AB	142	36	701	0.203	142	0.2	0.3	6.447	A
C-A	32	8			32				
A-B	36	9			36				
A-C	78	20			78				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	218	55	609	0.358	218	0.5	0.6	9.213	A
C-AB	142	36	701	0.203	142	0.3	0.3	6.450	A
C-A	32	8			32				
A-B	36	9			36				
A-C	78	20			78				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	178	44	619	0.287	179	0.6	0.4	8.177	A
C-AB	115	29	702	0.164	115	0.3	0.2	6.143	A
C-A	27	7			27				
A-B	30	7			30				
A-C	64	16			64				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	149	37	627	0.238	149	0.4	0.3	7.542	A
C-AB	96	24	703	0.136	96	0.2	0.2	5.933	A
C-A	23	6			23				
A-B	25	6			25				
A-C	53	13			53				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.03	0.26	0.55	0.55			N/A	N/A
C-AB	0.27	0.03	0.26	0.46	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.03	0.29	1.26	2.56			N/A	N/A
C-AB	0.27	0.03	0.30	0.87	1.20			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.41	0.00	0.00	0.41	0.41			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2029 Future Year, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		4.15	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.15	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	Relationship type	Relationship
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	85	100.000
B - Sandy Lane		ONE HOUR	✓	99	100.000
C - Hophurst Lane		ONE HOUR	✓	204	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	31	54
	B - Sandy Lane	57	0	42
	C - Hophurst Lane	81	123	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	17	6
	B - Sandy Lane	13	0	13
	C - Hophurst Lane	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.19	7.69	0.2	1.1	A	91	136
C-AB	0.21	6.18	0.3	1.3	A	127	190
C-A						61	92
A-B						28	42
A-C						50	75

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	600	0.124	74	0.0	0.1	6.836	A
C-AB	101	25	728	0.139	101	0.0	0.2	5.737	A
C-A	52	13			52				
A-B	23	6			23				
A-C	41	10			41				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22	590	0.151	89	0.1	0.2	7.175	A
C-AB	123	31	732	0.169	123	0.2	0.2	5.917	A
C-A	60	15			60				
A-B	28	7			28				
A-C	49	12			49				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	577	0.189	109	0.2	0.2	7.681	A
C-AB	155	39	737	0.210	154	0.2	0.3	6.175	A
C-A	70	18			70				
A-B	34	8			34				
A-C	60	15			60				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	577	0.189	109	0.2	0.2	7.688	A
C-AB	155	39	737	0.210	155	0.3	0.3	6.182	A
C-A	70	18			70				
A-B	34	8			34				
A-C	60	15			60				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22	590	0.151	89	0.2	0.2	7.186	A
C-AB	123	31	732	0.169	124	0.3	0.2	5.926	A
C-A	60	15			60				
A-B	28	7			28				
A-C	49	12			49				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	600	0.124	75	0.2	0.1	6.857	A
C-AB	102	25	728	0.140	102	0.2	0.2	5.756	A
C-A	52	13			52				
A-B	23	6			23				
A-C	41	10			41				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.29	0.03	0.26	0.46	0.49			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.03	0.28	0.62	1.07			N/A	N/A
C-AB	0.29	0.03	0.31	0.97	1.26			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 Future Year, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		6.05	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.05	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	Relationship type	Relationship
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	112	100.000
B - Sandy Lane		ONE HOUR	✓	214	100.000
C - Hophurst Lane		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	36	77
	B - Sandy Lane	79	0	135
	C - Hophurst Lane	39	132	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	6	0
	B - Sandy Lane	5	0	0
	C - Hophurst Lane	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.39	9.76	0.6	2.8	A	196	294
C-AB	0.22	6.60	0.3	1.3	A	128	191
C-A						29	43
A-B						33	49
A-C						70	105

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	624	0.258	160	0.0	0.3	7.727	A
C-AB	103	26	702	0.147	103	0.0	0.2	6.000	A
C-A	25	6			25				
A-B	27	7			27				
A-C	58	14			58				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	192	48	616	0.312	192	0.3	0.4	8.482	A
C-AB	125	31	701	0.178	124	0.2	0.2	6.239	A
C-A	29	7			29				
A-B	32	8			32				
A-C	69	17			69				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	235	59	604	0.390	235	0.4	0.6	9.723	A
C-AB	154	39	700	0.221	154	0.2	0.3	6.592	A
C-A	33	8			33				
A-B	39	10			39				
A-C	84	21			84				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	235	59	604	0.390	235	0.6	0.6	9.761	A
C-AB	155	39	700	0.221	154	0.3	0.3	6.598	A
C-A	33	8			33				
A-B	39	10			39				
A-C	84	21			84				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	192	48	616	0.312	193	0.6	0.5	8.530	A
C-AB	125	31	701	0.178	125	0.3	0.2	6.249	A
C-A	29	7			29				
A-B	32	8			32				
A-C	69	17			69				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	624	0.258	161	0.5	0.4	7.790	A
C-AB	103	26	702	0.147	104	0.2	0.2	6.016	A
C-A	25	6			25				
A-B	27	7			27				
A-C	58	14			58				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.03	0.26	0.63	0.63			N/A	N/A
C-AB	0.29	0.03	0.25	0.46	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.03	0.29	1.13	2.76			N/A	N/A
C-AB	0.30	0.03	0.31	1.02	1.31			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 + Committed Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		4.15	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.15	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	Relationship type	Relationship
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	85	100.000
B - Sandy Lane		ONE HOUR	✓	99	100.000
C - Hophurst Lane		ONE HOUR	✓	204	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	31	54
	B - Sandy Lane	57	0	42
	C - Hophurst Lane	81	123	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	17	6
	B - Sandy Lane	13	0	13
	C - Hophurst Lane	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.19	7.69	0.2	1.1	A	91	136
C-AB	0.21	6.18	0.3	1.3	A	127	190
C-A						61	92
A-B						28	42
A-C						50	75

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	600	0.124	74	0.0	0.1	6.836	A
C-AB	101	25	728	0.139	101	0.0	0.2	5.737	A
C-A	52	13			52				
A-B	23	6			23				
A-C	41	10			41				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22	590	0.151	89	0.1	0.2	7.175	A
C-AB	123	31	732	0.169	123	0.2	0.2	5.917	A
C-A	60	15			60				
A-B	28	7			28				
A-C	49	12			49				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	577	0.189	109	0.2	0.2	7.681	A
C-AB	155	39	737	0.210	154	0.2	0.3	6.175	A
C-A	70	18			70				
A-B	34	8			34				
A-C	60	15			60				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	577	0.189	109	0.2	0.2	7.688	A
C-AB	155	39	737	0.210	155	0.3	0.3	6.182	A
C-A	70	18			70				
A-B	34	8			34				
A-C	60	15			60				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22	590	0.151	89	0.2	0.2	7.186	A
C-AB	123	31	732	0.169	124	0.3	0.2	5.926	A
C-A	60	15			60				
A-B	28	7			28				
A-C	49	12			49				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	600	0.124	75	0.2	0.1	6.857	A
C-AB	102	25	728	0.140	102	0.2	0.2	5.756	A
C-A	52	13			52				
A-B	23	6			23				
A-C	41	10			41				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.29	0.03	0.26	0.46	0.49			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.03	0.28	0.62	1.07			N/A	N/A
C-AB	0.29	0.03	0.31	0.97	1.26			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 + Committed Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		6.05	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.05	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	Relationship type	Relationship
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	112	100.000
B - Sandy Lane		ONE HOUR	✓	214	100.000
C - Hophurst Lane		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	36	77
	B - Sandy Lane	79	0	135
	C - Hophurst Lane	39	132	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	6	0
	B - Sandy Lane	5	0	0
	C - Hophurst Lane	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.39	9.76	0.6	2.8	A	196	294
C-AB	0.22	6.60	0.3	1.3	A	128	191
C-A						29	43
A-B						33	49
A-C						70	105

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	624	0.258	160	0.0	0.3	7.727	A
C-AB	103	26	702	0.147	103	0.0	0.2	6.000	A
C-A	25	6			25				
A-B	27	7			27				
A-C	58	14			58				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	192	48	616	0.312	192	0.3	0.4	8.482	A
C-AB	125	31	701	0.178	124	0.2	0.2	6.239	A
C-A	29	7			29				
A-B	32	8			32				
A-C	69	17			69				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	235	59	604	0.390	235	0.4	0.6	9.723	A
C-AB	154	39	700	0.221	154	0.2	0.3	6.592	A
C-A	33	8			33				
A-B	39	10			39				
A-C	84	21			84				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	235	59	604	0.390	235	0.6	0.6	9.761	A
C-AB	155	39	700	0.221	154	0.3	0.3	6.601	A
C-A	33	8			33				
A-B	39	10			39				
A-C	84	21			84				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	192	48	616	0.312	193	0.6	0.5	8.530	A
C-AB	125	31	701	0.178	125	0.3	0.2	6.249	A
C-A	29	7			29				
A-B	32	8			32				
A-C	69	17			69				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	624	0.258	161	0.5	0.4	7.789	A
C-AB	103	26	702	0.147	104	0.2	0.2	6.018	A
C-A	25	6			25				
A-B	27	7			27				
A-C	58	14			58				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.03	0.26	0.63	0.63			N/A	N/A
C-AB	0.29	0.03	0.25	0.46	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.03	0.29	1.13	2.76			N/A	N/A
C-AB	0.30	0.03	0.31	1.02	1.31			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 + Committed Development + Development (350 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		4.21	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.21	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	Relationship type	Relationship
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	87	100.000
B - Sandy Lane		ONE HOUR	✓	103	100.000
C - Hophurst Lane		ONE HOUR	✓	204	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	32	54
	B - Sandy Lane	62	0	42
	C - Hophurst Lane	81	123	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	16	6
	B - Sandy Lane	12	0	13
	C - Hophurst Lane	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	7.82	0.2	1.2	A	95	142
C-AB	0.21	6.19	0.3	1.3	A	127	190
C-A						61	91
A-B						30	44
A-C						50	75

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	19	597	0.130	77	0.0	0.1	6.918	A
C-AB	101	25	727	0.139	101	0.0	0.2	5.740	A
C-A	52	13			52				
A-B	24	6			24				
A-C	41	10			41				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	587	0.158	93	0.1	0.2	7.277	A
C-AB	123	31	731	0.169	123	0.2	0.2	5.920	A
C-A	60	15			60				
A-B	29	7			29				
A-C	49	12			49				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	574	0.198	113	0.2	0.2	7.813	A
C-AB	155	39	737	0.210	154	0.2	0.3	6.180	A
C-A	70	18			70				
A-B	36	9			36				
A-C	60	15			60				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	574	0.198	113	0.2	0.2	7.822	A
C-AB	155	39	737	0.210	155	0.3	0.3	6.187	A
C-A	70	18			70				
A-B	36	9			36				
A-C	60	15			60				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	587	0.158	93	0.2	0.2	7.291	A
C-AB	123	31	731	0.169	124	0.3	0.2	5.929	A
C-A	60	15			60				
A-B	29	7			29				
A-C	49	12			49				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	19	597	0.130	78	0.2	0.2	6.942	A
C-AB	102	25	727	0.140	102	0.2	0.2	5.758	A
C-A	52	13			52				
A-B	24	6			24				
A-C	41	10			41				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.24	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.29	0.03	0.26	0.46	0.49			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.03	0.29	0.78	1.16			N/A	N/A
C-AB	0.29	0.03	0.31	0.98	1.26			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 + Committed Development + Development (350 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		6.06	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.06	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	Relationship type	Relationship
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	116	100.000
B - Sandy Lane		ONE HOUR	✓	215	100.000
C - Hophurst Lane		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	39	77
	B - Sandy Lane	80	0	135
	C - Hophurst Lane	39	132	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	5	0
	B - Sandy Lane	5	0	0
	C - Hophurst Lane	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.39	9.85	0.6	2.8	A	198	296
C-AB	0.22	6.61	0.3	1.3	A	128	191
C-A						29	43
A-B						36	54
A-C						70	105

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	162	41	623	0.260	161	0.0	0.3	7.767	A
C-AB	103	26	701	0.147	103	0.0	0.2	6.007	A
C-A	25	6			25				
A-B	30	7			30				
A-C	58	14			58				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	48	614	0.315	193	0.3	0.5	8.538	A
C-AB	125	31	700	0.178	124	0.2	0.2	6.249	A
C-A	29	7			29				
A-B	35	9			35				
A-C	69	17			69				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	237	59	603	0.394	236	0.5	0.6	9.811	A
C-AB	154	39	699	0.221	154	0.2	0.3	6.606	A
C-A	33	8			33				
A-B	43	11			43				
A-C	84	21			84				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	237	59	603	0.394	237	0.6	0.6	9.849	A
C-AB	155	39	699	0.221	155	0.3	0.3	6.612	A
C-A	33	8			33				
A-B	43	11			43				
A-C	84	21			84				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	48	614	0.315	194	0.6	0.5	8.588	A
C-AB	125	31	700	0.178	125	0.3	0.2	6.261	A
C-A	29	7			29				
A-B	35	9			35				
A-C	69	17			69				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	162	41	623	0.260	163	0.5	0.4	7.832	A
C-AB	103	26	701	0.148	104	0.2	0.2	6.024	A
C-A	25	6			25				
A-B	30	7			30				
A-C	58	14			58				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.03	0.26	0.64	0.64			N/A	N/A
C-AB	0.30	0.03	0.25	0.46	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.03	0.29	1.11	2.78			N/A	N/A
C-AB	0.30	0.03	0.31	1.03	1.31			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.00	0.00	0.47	0.47			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 + Committed Development + Development (450 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		4.23	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.23	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	Relationship type	Relationship
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	87	100.000
B - Sandy Lane		ONE HOUR	✓	104	100.000
C - Hophurst Lane		ONE HOUR	✓	204	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	33	54
	B - Sandy Lane	63	0	42
	C - Hophurst Lane	81	123	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	16	6
	B - Sandy Lane	12	0	13
	C - Hophurst Lane	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	7.86	0.2	1.2	A	96	143
C-AB	0.21	6.19	0.3	1.3	A	127	190
C-A						61	91
A-B						30	45
A-C						50	75

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	20	596	0.132	78	0.0	0.2	6.942	A
C-AB	101	25	727	0.140	101	0.0	0.2	5.741	A
C-A	52	13			52				
A-B	25	6			25				
A-C	41	10			41				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	94	23	586	0.160	94	0.2	0.2	7.305	A
C-AB	123	31	731	0.169	123	0.2	0.2	5.921	A
C-A	60	15			60				
A-B	29	7			29				
A-C	49	12			49				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	573	0.200	115	0.2	0.2	7.851	A
C-AB	155	39	737	0.210	154	0.2	0.3	6.181	A
C-A	70	18			70				
A-B	36	9			36				
A-C	60	15			60				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	573	0.200	115	0.2	0.2	7.860	A
C-AB	155	39	737	0.210	155	0.3	0.3	6.188	A
C-A	70	18			70				
A-B	36	9			36				
A-C	60	15			60				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	94	23	586	0.160	94	0.2	0.2	7.317	A
C-AB	123	31	731	0.169	124	0.3	0.2	5.930	A
C-A	60	15			60				
A-B	29	7			29				
A-C	49	12			49				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	20	596	0.132	79	0.2	0.2	6.963	A
C-AB	102	25	727	0.140	102	0.2	0.2	5.759	A
C-A	52	13			52				
A-B	25	6			25				
A-C	41	10			41				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.29	0.03	0.26	0.46	0.49			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.03	0.29	0.82	1.18			N/A	N/A
C-AB	0.29	0.03	0.31	0.98	1.26			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 + Committed Development + Development (450 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		6.06	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.06	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	Relationship type	Relationship
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	117	100.000
B - Sandy Lane		ONE HOUR	✓	216	100.000
C - Hophurst Lane		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	40	77
	B - Sandy Lane	81	0	135
	C - Hophurst Lane	39	132	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	5	0
	B - Sandy Lane	5	0	0
	C - Hophurst Lane	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.39	9.87	0.6	2.8	A	198	297
C-AB	0.22	6.62	0.3	1.3	A	128	191
C-A						29	43
A-B						37	56
A-C						70	105

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	163	41	623	0.261	161	0.0	0.3	7.778	A
C-AB	103	26	701	0.148	103	0.0	0.2	6.010	A
C-A	25	6			25				
A-B	30	8			30				
A-C	58	14			58				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	49	614	0.316	194	0.3	0.5	8.555	A
C-AB	125	31	700	0.178	124	0.2	0.2	6.252	A
C-A	29	7			29				
A-B	36	9			36				
A-C	69	17			69				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	59	602	0.395	237	0.5	0.6	9.834	A
C-AB	155	39	699	0.221	154	0.2	0.3	6.609	A
C-A	33	8			33				
A-B	45	11			45				
A-C	84	21			84				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	59	602	0.395	238	0.6	0.6	9.875	A
C-AB	155	39	699	0.221	155	0.3	0.3	6.616	A
C-A	33	8			33				
A-B	45	11			45				
A-C	84	21			84				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	49	614	0.316	195	0.6	0.5	8.604	A
C-AB	125	31	700	0.178	125	0.3	0.2	6.261	A
C-A	29	7			29				
A-B	36	9			36				
A-C	69	17			69				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	163	41	622	0.261	163	0.5	0.4	7.843	A
C-AB	103	26	701	0.148	104	0.2	0.2	6.026	A
C-A	25	6			25				
A-B	30	8			30				
A-C	58	14			58				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.03	0.26	0.64	0.64			N/A	N/A
C-AB	0.30	0.03	0.25	0.46	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.65	0.03	0.29	1.10	2.78			N/A	N/A
C-AB	0.30	0.03	0.31	1.03	1.31			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.00	0.00	0.47	0.47			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.1.0.1820
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Filename: Sandy Lane_Hophurst Lane_Vicarage Road.j10
Path: T:\Projects\9000 Series Project Numbers\9155ITB Wychwood, Turners Hill Rd, Crawley Down\Tech\Assessments\Picady\2024
Report generation date: 08/03/2024 10:02:46

»2023 Observed, AM
»2023 Observed, PM
»2029 Future Year, AM
»2029 Future Year, PM
»2029 + Committed Development, AM
»2029 + Committed Development, PM
»2029 + Committed Development + Development (350 Homes), AM
»2029 + Committed Development + Development (350 Homes), PM
»2029 + Committed Development + Development (450 Homes), AM
»2029 + Committed Development + Development (450 Homes), PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
	2023 Observed					
Stream B-AC	0.2	8.78	0.20	0.6	9.21	0.36
Stream C-AB	0.3	6.27	0.20	0.3	6.45	0.20
	2029 Future Year					
Stream B-AC	0.2	7.69	0.19	0.6	9.76	0.39
Stream C-AB	0.3	6.18	0.21	0.3	6.60	0.22
	2029 + Committed Development					
Stream B-AC	0.2	7.69	0.19	0.6	9.76	0.39
Stream C-AB	0.3	6.18	0.21	0.3	6.60	0.22
	2029 + Committed Development + Development (350 Homes)					
Stream B-AC	0.2	7.82	0.20	0.6	9.85	0.39
Stream C-AB	0.3	6.19	0.21	0.3	6.61	0.22
	2029 + Committed Development + Development (450 Homes)					
Stream B-AC	0.2	7.86	0.20	0.6	9.87	0.39
Stream C-AB	0.3	6.19	0.21	0.3	6.62	0.22

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

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

File summary

File Description

Title	
Location	
Site number	
Date	22/02/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\basingstoke.hotdesk
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use 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	Relationship type	Relationship
D1	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓		
D2	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓		
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2
D5	Committed Development	AM	ONE HOUR	07:00	08:30	15			
D6	Committed Development	PM	ONE HOUR	16:30	18:00	15			
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6
D9	Development 350 Homes	AM	ONE HOUR	07:00	08:30	15			
D10	Development 350 Homes	PM	ONE HOUR	16:30	18:00	15			
D11	Development 450 Homes	AM	ONE HOUR	07:00	08:30	15			
D12	Development 450 Homes	PM	ONE HOUR	16:30	18:00	15			
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2023-2029 AM		1.0644
G2			1.0794

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2023 Observed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		4.49	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.49	A

Arms

Arms

Arm	Name	Description	Arm type
A	Vicarage Road		Major
B	Sandy Lane		Minor
C	Hophurst Lane		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 - Hophurst Lane	6.25			230.4	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Sandy Lane	One lane	4.58	56	30

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	591	0.106	0.269	0.169	0.385
B-C	744	0.113	0.285	-	-
C-B	707	0.271	0.271	-	-

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	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	80	100.000
B - Sandy Lane		ONE HOUR	✓	93	100.000
C - Hophurst Lane		ONE HOUR	✓	192	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	29	51
	B - Sandy Lane	54	0	39
	C - Hophurst Lane	76	116	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	17	6
	B - Sandy Lane	13	0	13
	C - Hophurst Lane	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	8.78	0.2	1.2	A	85	128
C-AB	0.20	6.27	0.3	1.2	A	118	178
C-A						58	87
A-B						27	40
A-C						47	70

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	18	532	0.132	69	0.0	0.2	7.772	A
C-AB	95	24	711	0.134	94	0.0	0.2	5.831	A
C-A	50	12			50				
A-B	22	5			22				
A-C	38	10			38				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	524	0.160	83	0.1	0.2	8.174	A
C-AB	115	29	715	0.161	115	0.2	0.2	6.007	A
C-A	57	14			57				
A-B	26	7			26				
A-C	46	11			46				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	102	26	512	0.200	102	0.2	0.2	8.769	A
C-AB	145	36	720	0.201	144	0.2	0.3	6.258	A
C-A	67	17			67				
A-B	32	8			32				
A-C	56	14			56				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	102	26	512	0.200	102	0.2	0.2	8.781	A
C-AB	145	36	720	0.201	145	0.3	0.3	6.265	A
C-A	67	17			67				
A-B	32	8			32				
A-C	56	14			56				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	524	0.160	84	0.2	0.2	8.189	A
C-AB	115	29	715	0.162	116	0.3	0.2	6.015	A
C-A	57	14			57				
A-B	26	7			26				
A-C	46	11			46				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	70	18	532	0.132	70	0.2	0.2	7.802	A
C-AB	95	24	711	0.134	95	0.2	0.2	5.848	A
C-A	50	12			50				
A-B	22	5			22				
A-C	38	10			38				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.28	0.03	0.26	0.46	0.49			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.03	0.29	0.83	1.19			N/A	N/A
C-AB	0.28	0.03	0.30	0.88	1.20			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

2023 Observed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		5.77	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	5.77	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	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	104	100.000
B - Sandy Lane		ONE HOUR	✓	198	100.000
C - Hophurst Lane		ONE HOUR	✓	158	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	33	71
	B - Sandy Lane	73	0	125
	C - Hophurst Lane	36	122	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	6	0
	B - Sandy Lane	5	0	0
	C - Hophurst Lane	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.36	9.21	0.6	2.6	A	182	273
C-AB	0.20	6.45	0.3	1.2	A	118	177
C-A						27	41
A-B						30	45
A-C						65	98

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	149	37	627	0.238	148	0.0	0.3	7.489	A
C-AB	96	24	703	0.136	95	0.0	0.2	5.918	A
C-A	23	6			23				
A-B	25	6			25				
A-C	53	13			53				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	178	44	619	0.287	178	0.3	0.4	8.141	A
C-AB	115	29	702	0.164	115	0.2	0.2	6.133	A
C-A	27	7			27				
A-B	30	7			30				
A-C	64	16			64				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	218	55	609	0.358	217	0.4	0.5	9.183	A
C-AB	142	36	701	0.203	142	0.2	0.3	6.447	A
C-A	32	8			32				
A-B	36	9			36				
A-C	78	20			78				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	218	55	609	0.358	218	0.5	0.6	9.213	A
C-AB	142	36	701	0.203	142	0.3	0.3	6.450	A
C-A	32	8			32				
A-B	36	9			36				
A-C	78	20			78				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	178	44	619	0.287	179	0.6	0.4	8.177	A
C-AB	115	29	702	0.164	115	0.3	0.2	6.143	A
C-A	27	7			27				
A-B	30	7			30				
A-C	64	16			64				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	149	37	627	0.238	149	0.4	0.3	7.542	A
C-AB	96	24	703	0.136	96	0.2	0.2	5.933	A
C-A	23	6			23				
A-B	25	6			25				
A-C	53	13			53				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.31	0.00	0.00	0.31	0.31			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.03	0.26	0.55	0.55			N/A	N/A
C-AB	0.27	0.03	0.26	0.46	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.03	0.29	1.26	2.56			N/A	N/A
C-AB	0.27	0.03	0.30	0.87	1.20			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.41	0.00	0.00	0.41	0.41			N/A	N/A
C-AB	0.21	0.00	0.00	0.21	0.21			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.00	0.00	0.32	0.32			N/A	N/A
C-AB	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2029 Future Year, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		4.15	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.15	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	Relationship type	Relationship
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	85	100.000
B - Sandy Lane		ONE HOUR	✓	99	100.000
C - Hophurst Lane		ONE HOUR	✓	204	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	31	54
	B - Sandy Lane	57	0	42
	C - Hophurst Lane	81	123	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	17	6
	B - Sandy Lane	13	0	13
	C - Hophurst Lane	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.19	7.69	0.2	1.1	A	91	136
C-AB	0.21	6.18	0.3	1.3	A	127	190
C-A						61	92
A-B						28	42
A-C						50	75

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	600	0.124	74	0.0	0.1	6.836	A
C-AB	101	25	728	0.139	101	0.0	0.2	5.737	A
C-A	52	13			52				
A-B	23	6			23				
A-C	41	10			41				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22	590	0.151	89	0.1	0.2	7.175	A
C-AB	123	31	732	0.169	123	0.2	0.2	5.917	A
C-A	60	15			60				
A-B	28	7			28				
A-C	49	12			49				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	577	0.189	109	0.2	0.2	7.681	A
C-AB	155	39	737	0.210	154	0.2	0.3	6.175	A
C-A	70	18			70				
A-B	34	8			34				
A-C	60	15			60				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	577	0.189	109	0.2	0.2	7.688	A
C-AB	155	39	737	0.210	155	0.3	0.3	6.182	A
C-A	70	18			70				
A-B	34	8			34				
A-C	60	15			60				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22	590	0.151	89	0.2	0.2	7.186	A
C-AB	123	31	732	0.169	124	0.3	0.2	5.926	A
C-A	60	15			60				
A-B	28	7			28				
A-C	49	12			49				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	600	0.124	75	0.2	0.1	6.857	A
C-AB	102	25	728	0.140	102	0.2	0.2	5.756	A
C-A	52	13			52				
A-B	23	6			23				
A-C	41	10			41				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.29	0.03	0.26	0.46	0.49			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.03	0.28	0.62	1.07			N/A	N/A
C-AB	0.29	0.03	0.31	0.97	1.26			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 Future Year, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		6.05	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.05	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	Relationship type	Relationship
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	112	100.000
B - Sandy Lane		ONE HOUR	✓	214	100.000
C - Hophurst Lane		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	36	77
	B - Sandy Lane	79	0	135
	C - Hophurst Lane	39	132	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	6	0
	B - Sandy Lane	5	0	0
	C - Hophurst Lane	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.39	9.76	0.6	2.8	A	196	294
C-AB	0.22	6.60	0.3	1.3	A	128	191
C-A						29	43
A-B						33	49
A-C						70	105

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	624	0.258	160	0.0	0.3	7.727	A
C-AB	103	26	702	0.147	103	0.0	0.2	6.000	A
C-A	25	6			25				
A-B	27	7			27				
A-C	58	14			58				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	192	48	616	0.312	192	0.3	0.4	8.482	A
C-AB	125	31	701	0.178	124	0.2	0.2	6.239	A
C-A	29	7			29				
A-B	32	8			32				
A-C	69	17			69				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	235	59	604	0.390	235	0.4	0.6	9.723	A
C-AB	154	39	700	0.221	154	0.2	0.3	6.592	A
C-A	33	8			33				
A-B	39	10			39				
A-C	84	21			84				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	235	59	604	0.390	235	0.6	0.6	9.761	A
C-AB	155	39	700	0.221	154	0.3	0.3	6.598	A
C-A	33	8			33				
A-B	39	10			39				
A-C	84	21			84				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	192	48	616	0.312	193	0.6	0.5	8.530	A
C-AB	125	31	701	0.178	125	0.3	0.2	6.249	A
C-A	29	7			29				
A-B	32	8			32				
A-C	69	17			69				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	624	0.258	161	0.5	0.4	7.790	A
C-AB	103	26	702	0.147	104	0.2	0.2	6.016	A
C-A	25	6			25				
A-B	27	7			27				
A-C	58	14			58				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.03	0.26	0.63	0.63			N/A	N/A
C-AB	0.29	0.03	0.25	0.46	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.03	0.29	1.13	2.76			N/A	N/A
C-AB	0.30	0.03	0.31	1.02	1.31			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 + Committed Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		4.15	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.15	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	Relationship type	Relationship
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	85	100.000
B - Sandy Lane		ONE HOUR	✓	99	100.000
C - Hophurst Lane		ONE HOUR	✓	204	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	31	54
	B - Sandy Lane	57	0	42
	C - Hophurst Lane	81	123	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	17	6
	B - Sandy Lane	13	0	13
	C - Hophurst Lane	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.19	7.69	0.2	1.1	A	91	136
C-AB	0.21	6.18	0.3	1.3	A	127	190
C-A						61	92
A-B						28	42
A-C						50	75

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	600	0.124	74	0.0	0.1	6.836	A
C-AB	101	25	728	0.139	101	0.0	0.2	5.737	A
C-A	52	13			52				
A-B	23	6			23				
A-C	41	10			41				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22	590	0.151	89	0.1	0.2	7.175	A
C-AB	123	31	732	0.169	123	0.2	0.2	5.917	A
C-A	60	15			60				
A-B	28	7			28				
A-C	49	12			49				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	577	0.189	109	0.2	0.2	7.681	A
C-AB	155	39	737	0.210	154	0.2	0.3	6.175	A
C-A	70	18			70				
A-B	34	8			34				
A-C	60	15			60				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	109	27	577	0.189	109	0.2	0.2	7.688	A
C-AB	155	39	737	0.210	155	0.3	0.3	6.182	A
C-A	70	18			70				
A-B	34	8			34				
A-C	60	15			60				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	89	22	590	0.151	89	0.2	0.2	7.186	A
C-AB	123	31	732	0.169	124	0.3	0.2	5.926	A
C-A	60	15			60				
A-B	28	7			28				
A-C	49	12			49				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	600	0.124	75	0.2	0.1	6.857	A
C-AB	102	25	728	0.140	102	0.2	0.2	5.756	A
C-A	52	13			52				
A-B	23	6			23				
A-C	41	10			41				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.17	0.00	0.00	0.17	0.17			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.29	0.03	0.26	0.46	0.49			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.23	0.03	0.28	0.62	1.07			N/A	N/A
C-AB	0.29	0.03	0.31	0.97	1.26			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 + Committed Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		6.05	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.05	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	Relationship type	Relationship
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	112	100.000
B - Sandy Lane		ONE HOUR	✓	214	100.000
C - Hophurst Lane		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	36	77
	B - Sandy Lane	79	0	135
	C - Hophurst Lane	39	132	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	6	0
	B - Sandy Lane	5	0	0
	C - Hophurst Lane	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.39	9.76	0.6	2.8	A	196	294
C-AB	0.22	6.60	0.3	1.3	A	128	191
C-A						29	43
A-B						33	49
A-C						70	105

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	624	0.258	160	0.0	0.3	7.727	A
C-AB	103	26	702	0.147	103	0.0	0.2	6.000	A
C-A	25	6			25				
A-B	27	7			27				
A-C	58	14			58				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	192	48	616	0.312	192	0.3	0.4	8.482	A
C-AB	125	31	701	0.178	124	0.2	0.2	6.239	A
C-A	29	7			29				
A-B	32	8			32				
A-C	69	17			69				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	235	59	604	0.390	235	0.4	0.6	9.723	A
C-AB	154	39	700	0.221	154	0.2	0.3	6.592	A
C-A	33	8			33				
A-B	39	10			39				
A-C	84	21			84				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	235	59	604	0.390	235	0.6	0.6	9.761	A
C-AB	155	39	700	0.221	154	0.3	0.3	6.601	A
C-A	33	8			33				
A-B	39	10			39				
A-C	84	21			84				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	192	48	616	0.312	193	0.6	0.5	8.530	A
C-AB	125	31	701	0.178	125	0.3	0.2	6.249	A
C-A	29	7			29				
A-B	32	8			32				
A-C	69	17			69				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	161	40	624	0.258	161	0.5	0.4	7.789	A
C-AB	103	26	702	0.147	104	0.2	0.2	6.018	A
C-A	25	6			25				
A-B	27	7			27				
A-C	58	14			58				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.34	0.00	0.00	0.34	0.34			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.03	0.26	0.63	0.63			N/A	N/A
C-AB	0.29	0.03	0.25	0.46	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.63	0.03	0.29	1.13	2.76			N/A	N/A
C-AB	0.30	0.03	0.31	1.02	1.31			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.03	0.25	0.46	0.48			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 + Committed Development + Development (350 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		4.21	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.21	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	Relationship type	Relationship
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D9

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	87	100.000
B - Sandy Lane		ONE HOUR	✓	103	100.000
C - Hophurst Lane		ONE HOUR	✓	204	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	32	54
	B - Sandy Lane	62	0	42
	C - Hophurst Lane	81	123	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	16	6
	B - Sandy Lane	12	0	13
	C - Hophurst Lane	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	7.82	0.2	1.2	A	95	142
C-AB	0.21	6.19	0.3	1.3	A	127	190
C-A						61	91
A-B						30	44
A-C						50	75

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	19	597	0.130	77	0.0	0.1	6.918	A
C-AB	101	25	727	0.139	101	0.0	0.2	5.740	A
C-A	52	13			52				
A-B	24	6			24				
A-C	41	10			41				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	587	0.158	93	0.1	0.2	7.277	A
C-AB	123	31	731	0.169	123	0.2	0.2	5.920	A
C-A	60	15			60				
A-B	29	7			29				
A-C	49	12			49				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	574	0.198	113	0.2	0.2	7.813	A
C-AB	155	39	737	0.210	154	0.2	0.3	6.180	A
C-A	70	18			70				
A-B	36	9			36				
A-C	60	15			60				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	113	28	574	0.198	113	0.2	0.2	7.822	A
C-AB	155	39	737	0.210	155	0.3	0.3	6.187	A
C-A	70	18			70				
A-B	36	9			36				
A-C	60	15			60				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	93	23	587	0.158	93	0.2	0.2	7.291	A
C-AB	123	31	731	0.169	124	0.3	0.2	5.929	A
C-A	60	15			60				
A-B	29	7			29				
A-C	49	12			49				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	19	597	0.130	78	0.2	0.2	6.942	A
C-AB	102	25	727	0.140	102	0.2	0.2	5.758	A
C-A	52	13			52				
A-B	24	6			24				
A-C	41	10			41				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.24	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.29	0.03	0.26	0.46	0.49			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.03	0.29	0.78	1.16			N/A	N/A
C-AB	0.29	0.03	0.31	0.98	1.26			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 + Committed Development + Development (350 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		6.06	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.06	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	Relationship type	Relationship
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D10

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	116	100.000
B - Sandy Lane		ONE HOUR	✓	215	100.000
C - Hophurst Lane		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	39	77
	B - Sandy Lane	80	0	135
	C - Hophurst Lane	39	132	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	5	0
	B - Sandy Lane	5	0	0
	C - Hophurst Lane	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.39	9.85	0.6	2.8	A	198	296
C-AB	0.22	6.61	0.3	1.3	A	128	191
C-A						29	43
A-B						36	54
A-C						70	105

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	162	41	623	0.260	161	0.0	0.3	7.767	A
C-AB	103	26	701	0.147	103	0.0	0.2	6.007	A
C-A	25	6			25				
A-B	30	7			30				
A-C	58	14			58				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	48	614	0.315	193	0.3	0.5	8.538	A
C-AB	125	31	700	0.178	124	0.2	0.2	6.249	A
C-A	29	7			29				
A-B	35	9			35				
A-C	69	17			69				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	237	59	603	0.394	236	0.5	0.6	9.811	A
C-AB	154	39	699	0.221	154	0.2	0.3	6.606	A
C-A	33	8			33				
A-B	43	11			43				
A-C	84	21			84				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	237	59	603	0.394	237	0.6	0.6	9.849	A
C-AB	155	39	699	0.221	155	0.3	0.3	6.612	A
C-A	33	8			33				
A-B	43	11			43				
A-C	84	21			84				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	48	614	0.315	194	0.6	0.5	8.588	A
C-AB	125	31	700	0.178	125	0.3	0.2	6.261	A
C-A	29	7			29				
A-B	35	9			35				
A-C	69	17			69				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	162	41	623	0.260	163	0.5	0.4	7.832	A
C-AB	103	26	701	0.148	104	0.2	0.2	6.024	A
C-A	25	6			25				
A-B	30	7			30				
A-C	58	14			58				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.45	0.00	0.00	0.45	0.45			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.03	0.26	0.64	0.64			N/A	N/A
C-AB	0.30	0.03	0.25	0.46	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.03	0.29	1.11	2.78			N/A	N/A
C-AB	0.30	0.03	0.31	1.03	1.31			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.00	0.00	0.47	0.47			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 + Committed Development + Development (450 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		4.23	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	4.23	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	Relationship type	Relationship
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D7+D11

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	87	100.000
B - Sandy Lane		ONE HOUR	✓	104	100.000
C - Hophurst Lane		ONE HOUR	✓	204	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	33	54
	B - Sandy Lane	63	0	42
	C - Hophurst Lane	81	123	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	16	6
	B - Sandy Lane	12	0	13
	C - Hophurst Lane	3	2	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.20	7.86	0.2	1.2	A	96	143
C-AB	0.21	6.19	0.3	1.3	A	127	190
C-A						61	91
A-B						30	45
A-C						50	75

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	20	596	0.132	78	0.0	0.2	6.942	A
C-AB	101	25	727	0.140	101	0.0	0.2	5.741	A
C-A	52	13			52				
A-B	25	6			25				
A-C	41	10			41				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	94	23	586	0.160	94	0.2	0.2	7.305	A
C-AB	123	31	731	0.169	123	0.2	0.2	5.921	A
C-A	60	15			60				
A-B	29	7			29				
A-C	49	12			49				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	573	0.200	115	0.2	0.2	7.851	A
C-AB	155	39	737	0.210	154	0.2	0.3	6.181	A
C-A	70	18			70				
A-B	36	9			36				
A-C	60	15			60				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	115	29	573	0.200	115	0.2	0.2	7.860	A
C-AB	155	39	737	0.210	155	0.3	0.3	6.188	A
C-A	70	18			70				
A-B	36	9			36				
A-C	60	15			60				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	94	23	586	0.160	94	0.2	0.2	7.317	A
C-AB	123	31	731	0.169	124	0.3	0.2	5.930	A
C-A	60	15			60				
A-B	29	7			29				
A-C	49	12			49				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	78	20	596	0.132	79	0.2	0.2	6.963	A
C-AB	102	25	727	0.140	102	0.2	0.2	5.759	A
C-A	52	13			52				
A-B	25	6			25				
A-C	41	10			41				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.29	0.03	0.26	0.46	0.49			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.25	0.03	0.29	0.82	1.18			N/A	N/A
C-AB	0.29	0.03	0.31	0.98	1.26			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.19	0.00	0.00	0.19	0.19			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2029 + Committed Development + Development (450 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Hophurst Lane/Sandy Lane/Vicarage Road	T-Junction	Two-way	Two-way	Two-way		6.06	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	6.06	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	Relationship type	Relationship
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D8+D12

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Vicarage Road		ONE HOUR	✓	117	100.000
B - Sandy Lane		ONE HOUR	✓	216	100.000
C - Hophurst Lane		ONE HOUR	✓	171	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	40	77
	B - Sandy Lane	81	0	135
	C - Hophurst Lane	39	132	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Vicarage Road	B - Sandy Lane	C - Hophurst Lane
From	A - Vicarage Road	0	5	0
	B - Sandy Lane	5	0	0
	C - Hophurst Lane	0	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.39	9.87	0.6	2.8	A	198	297
C-AB	0.22	6.62	0.3	1.3	A	128	191
C-A						29	43
A-B						37	56
A-C						70	105

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	163	41	623	0.261	161	0.0	0.3	7.778	A
C-AB	103	26	701	0.148	103	0.0	0.2	6.010	A
C-A	25	6			25				
A-B	30	8			30				
A-C	58	14			58				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	49	614	0.316	194	0.3	0.5	8.555	A
C-AB	125	31	700	0.178	124	0.2	0.2	6.252	A
C-A	29	7			29				
A-B	36	9			36				
A-C	69	17			69				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	59	602	0.395	237	0.5	0.6	9.834	A
C-AB	155	39	699	0.221	154	0.2	0.3	6.609	A
C-A	33	8			33				
A-B	45	11			45				
A-C	84	21			84				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	238	59	602	0.395	238	0.6	0.6	9.875	A
C-AB	155	39	699	0.221	155	0.3	0.3	6.616	A
C-A	33	8			33				
A-B	45	11			45				
A-C	84	21			84				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	194	49	614	0.316	195	0.6	0.5	8.604	A
C-AB	125	31	700	0.178	125	0.3	0.2	6.261	A
C-A	29	7			29				
A-B	36	9			36				
A-C	69	17			69				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	163	41	622	0.261	163	0.5	0.4	7.843	A
C-AB	103	26	701	0.148	104	0.2	0.2	6.026	A
C-A	25	6			25				
A-B	30	8			30				
A-C	58	14			58				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.35	0.00	0.00	0.35	0.35			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.46	0.00	0.00	0.46	0.46			N/A	N/A
C-AB	0.22	0.00	0.00	0.22	0.22			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.64	0.03	0.26	0.64	0.64			N/A	N/A
C-AB	0.30	0.03	0.25	0.46	0.48			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.65	0.03	0.29	1.10	2.78			N/A	N/A
C-AB	0.30	0.03	0.31	1.03	1.31			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.47	0.00	0.00	0.47	0.47			N/A	N/A
C-AB	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.03	0.26	0.46	0.49			N/A	N/A
C-AB	0.18	0.00	0.00	0.18	0.18			N/A	N/A

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.1.0.1820
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Filename: Turners Hill Road_Sandy Lane.j10
Path: T:\Projects\9000 Series Project Numbers\9155ITB Wychwood, Turners Hill Rd, Crawley Down\Tech\Assessments\Picady\2024
Report generation date: 07/03/2024 15:13:40

»2023 Observed, AM
»2023 Observed, PM
»2029 Future Year, AM
»2029 Future Year, PM
»2029 + Committed Development, AM
»2029 + Committed Development, PM
»2029 + Committed Development + Development (350 Homes), AM
»2029 + Committed Development + Development (350 Homes), PM
»2029 + Committed Development + Development (450 Homes), AM
»2029 + Committed Development + Development (450 Homes), PM

Summary of junction performance

	AM			PM		
	Queue (Veh)	Delay (s)	RFC	Queue (Veh)	Delay (s)	RFC
	2023 Observed					
Stream B-AC	0.6	16.51	0.36	0.3	14.06	0.21
Stream C-AB	0.0	4.59	0.01	0.0	5.38	0.01
	2029 Future Year					
Stream B-AC	0.7	18.24	0.40	0.3	15.54	0.24
Stream C-AB	0.0	4.53	0.01	0.0	5.34	0.02
	2029 + Committed Development					
Stream B-AC	0.7	18.24	0.40	0.3	15.54	0.24
Stream C-AB	0.0	4.53	0.01	0.0	5.34	0.02
	2029 + Committed Development + Development (350 Homes)					
Stream B-AC	0.7	18.24	0.40	0.3	15.54	0.24
Stream C-AB	0.0	4.53	0.01	0.0	5.34	0.02
	2029 + Committed Development + Development (450 Homes)					
Stream B-AC	0.7	18.24	0.40	0.3	15.54	0.24
Stream C-AB	0.0	4.53	0.01	0.0	5.34	0.02

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

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

File summary

File Description

Title	
Location	
Site number	
Date	15/02/2024
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	I-TRANSPORT\basingstoke.hotdesk
Description	

Units

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

Analysis Options

Vehicle length (m)	Calculate Queue Percentiles	Calculate detailed queueing delay	Show lane queues in feet / metres	Show all PICADY stream intercepts	Calculate residual capacity	RFC Threshold	Average Delay threshold (s)	Queue threshold (PCU)	Use 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	Relationship type	Relationship
D1	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓		
D2	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓		
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2
D5	Committed Development	AM	ONE HOUR	07:00	08:30	15			
D6	Committed Development	PM	ONE HOUR	16:30	18:00	15			
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6
D9	Development 350 Homes	AM	ONE HOUR	07:00	08:30	15			
D10	Development 350 Homes	PM	ONE HOUR	16:30	18:00	15			
D11	Development 450 Homes	AM	ONE HOUR	07:00	08:30	15			
D12	Development 450 Homes	PM	ONE HOUR	16:30	18:00	15			
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6

Growth Factors

ID	Description	Use TEMPRO	Growth Factor
G1	2023-2029 AM		1.0644
G2	2023-2029 PM		1.0794

Growth factors are only active if the Demand Set references them in a Relationship.

Analysis Set Details

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

2023 Observed, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Turners Hill Road / Sandy Lane	T-Junction	Two-way	Two-way	Two-way		1.79	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.79	A

Arms

Arms

Arm	Name	Description	Arm type
A	Turners Hill Road (N)		Major
B	Sandy Lane		Minor
C	Turners Hill 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 - Turners Hill Road (S)	6.10			80.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
B - Sandy Lane	One lane	4.00	20	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (Veh/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	568	0.103	0.260	0.164	0.372
B-C	731	0.112	0.282	-	-
C-B	620	0.239	0.239	-	-

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	2023 Observed	AM	ONE HOUR	07:00	08:30	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (N)		ONE HOUR	✓	440	100.000
B - Sandy Lane		ONE HOUR	✓	112	100.000
C - Turners Hill Road (S)		ONE HOUR	✓	491	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	82	358
	B - Sandy Lane	108	0	4
	C - Turners Hill Road (S)	489	2	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	15	4
	B - Sandy Lane	6	0	0
	C - Turners Hill Road (S)	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.36	16.51	0.6	2.6	C	103	154
C-AB	0.01	4.59	0.0	0.5	A	4	6
C-A						446	670
A-B						75	113
A-C						329	493

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	404	0.208	83	0.0	0.3	11.173	B
C-AB	3	0.71	788	0.004	3	0.0	0.0	4.583	A
C-A	367	92			367				
A-B	62	15			62				
A-C	270	67			270				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	101	25	378	0.266	100	0.3	0.4	12.947	B
C-AB	4	0.96	825	0.005	4	0.0	0.0	4.377	A
C-A	438	109			438				
A-B	74	18			74				
A-C	322	80			322				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	123	31	341	0.361	123	0.4	0.6	16.400	C
C-AB	6	1	878	0.007	6	0.0	0.0	4.118	A
C-A	535	134			535				
A-B	90	23			90				
A-C	394	99			394				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	123	31	341	0.361	123	0.6	0.6	16.509	C
C-AB	6	1	878	0.007	6	0.0	0.0	4.126	A
C-A	535	134			535				
A-B	90	23			90				
A-C	394	99			394				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	101	25	378	0.266	101	0.6	0.4	13.056	B
C-AB	4	0.97	825	0.005	4	0.0	0.0	4.398	A
C-A	438	109			438				
A-B	74	18			74				
A-C	322	80			322				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	84	21	404	0.208	85	0.4	0.3	11.275	B
C-AB	3	0.71	788	0.004	3	0.0	0.0	4.594	A
C-A	367	92			367				
A-B	62	15			62				
A-C	270	67			270				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.26	0.00	0.00	0.26	0.26			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.36	0.00	0.00	0.36	0.36			N/A	N/A
C-AB	0.00	0.00	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.55	0.03	0.26	0.55	0.55			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.56	0.03	0.30	1.42	2.61			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.37	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.03	0.25	0.45	0.48			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2023 Observed, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Turners Hill Road / Sandy Lane	T-Junction	Two-way	Two-way	Two-way		0.82	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.82	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	2023 Observed	PM	ONE HOUR	16:30	18:00	15	✓

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (N)		ONE HOUR	✓	726	100.000
B - Sandy Lane		ONE HOUR	✓	63	100.000
C - Turners Hill Road (S)		ONE HOUR	✓	351	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	191	535
	B - Sandy Lane	58	0	5
	C - Turners Hill Road (S)	347	4	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	2	1
	B - Sandy Lane	3	0	0
	C - Turners Hill Road (S)	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.21	14.06	0.3	1.3	B	58	87
C-AB	0.01	5.38	0.0	0.5	A	7	10
C-A						315	473
A-B						175	263
A-C						491	736

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	401	0.118	47	0.0	0.1	10.164	B
C-AB	5	1	675	0.007	5	0.0	0.0	5.368	A
C-A	259	65			259				
A-B	144	36			144				
A-C	403	101			403				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	369	0.153	56	0.1	0.2	11.509	B
C-AB	7	2	691	0.010	7	0.0	0.0	5.255	A
C-A	309	77			309				
A-B	172	43			172				
A-C	481	120			481				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	325	0.213	69	0.2	0.3	14.023	B
C-AB	9	2	714	0.013	9	0.0	0.0	5.099	A
C-A	377	94			377				
A-B	210	53			210				
A-C	589	147			589				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	69	17	325	0.213	69	0.3	0.3	14.062	B
C-AB	9	2	714	0.013	9	0.0	0.0	5.108	A
C-A	377	94			377				
A-B	210	53			210				
A-C	589	147			589				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	57	14	369	0.153	57	0.3	0.2	11.548	B
C-AB	7	2	691	0.010	7	0.0	0.0	5.273	A
C-A	309	77			309				
A-B	172	43			172				
A-C	481	120			481				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	47	12	401	0.118	48	0.2	0.1	10.208	B
C-AB	5	1	675	0.007	5	0.0	0.0	5.378	A
C-A	259	65			259				
A-B	144	36			144				
A-C	403	101			403				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.13	0.00	0.00	0.13	0.13			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.27	0.03	0.30	0.94	1.26			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.18	0.00	0.00	0.18	0.18			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.14	0.00	0.00	0.14	0.14			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2029 Future Year, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Turners Hill Road / Sandy Lane	T-Junction	Two-way	Two-way	Two-way		1.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.98	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	Relationship type	Relationship
D3	2029 Future Year	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D1*G1

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (N)		ONE HOUR	✓	468	100.000
B - Sandy Lane		ONE HOUR	✓	119	100.000
C - Turners Hill Road (S)		ONE HOUR	✓	523	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	87	381
	B - Sandy Lane	115	0	4
	C - Turners Hill Road (S)	520	2	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	15	4
	B - Sandy Lane	6	0	0
	C - Turners Hill Road (S)	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.40	18.24	0.7	3.1	C	109	164
C-AB	0.01	4.53	0.0	0.5	A	5	7
C-A						475	712
A-B						80	120
A-C						350	524

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	396	0.227	89	0.0	0.3	11.681	B
C-AB	3	0.79	800	0.004	3	0.0	0.0	4.516	A
C-A	390	98			390				
A-B	66	16			66				
A-C	287	72			287				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	367	0.292	107	0.3	0.4	13.781	B
C-AB	4	1	840	0.005	4	0.0	0.0	4.301	A
C-A	465	116			465				
A-B	78	20			78				
A-C	343	86			343				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	328	0.400	130	0.4	0.6	18.083	C
C-AB	7	2	897	0.007	6	0.0	0.0	4.033	A
C-A	569	142			569				
A-B	96	24			96				
A-C	420	105			420				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	328	0.400	131	0.6	0.7	18.243	C
C-AB	7	2	897	0.007	7	0.0	0.0	4.041	A
C-A	569	142			569				
A-B	96	24			96				
A-C	420	105			420				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	367	0.292	108	0.7	0.4	13.930	B
C-AB	4	1	840	0.005	4	0.0	0.0	4.322	A
C-A	465	116			465				
A-B	78	20			78				
A-C	343	86			343				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	396	0.227	90	0.4	0.3	11.807	B
C-AB	3	0.79	800	0.004	3	0.0	0.0	4.527	A
C-A	390	98			390				
A-B	66	16			66				
A-C	287	72			287				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.65	0.03	0.26	0.65	0.65			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.66	0.03	0.30	1.45	3.10			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.42	0.03	0.33	1.08	1.29			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2029 Future Year, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Turners Hill Road / Sandy Lane	T-Junction	Two-way	Two-way	Two-way		0.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.90	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	Relationship type	Relationship
D4	2029 Future Year	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D2*G2

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (N)		ONE HOUR	✓	784	100.000
B - Sandy Lane		ONE HOUR	✓	68	100.000
C - Turners Hill Road (S)		ONE HOUR	✓	379	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	206	577
	B - Sandy Lane	63	0	5
	C - Turners Hill Road (S)	375	4	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	2	1
	B - Sandy Lane	3	0	0
	C - Turners Hill Road (S)	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.24	15.54	0.3	1.4	C	62	94
C-AB	0.02	5.34	0.0	0.5	A	8	12
C-A						340	509
A-B						189	284
A-C						530	795

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	388	0.132	51	0.0	0.2	10.664	B
C-AB	6	1	682	0.008	6	0.0	0.0	5.324	A
C-A	280	70			280				
A-B	155	39			155				
A-C	435	109			435				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	354	0.173	61	0.2	0.2	12.299	B
C-AB	8	2	699	0.011	7	0.0	0.0	5.200	A
C-A	333	83			333				
A-B	185	46			185				
A-C	519	130			519				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	306	0.244	74	0.2	0.3	15.488	C
C-AB	11	3	726	0.015	11	0.0	0.0	5.030	A
C-A	406	102			406				
A-B	227	57			227				
A-C	636	159			636				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	306	0.244	75	0.3	0.3	15.544	C
C-AB	11	3	726	0.015	11	0.0	0.0	5.037	A
C-A	406	102			406				
A-B	227	57			227				
A-C	636	159			636				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	354	0.173	62	0.3	0.2	12.346	B
C-AB	8	2	699	0.011	8	0.0	0.0	5.220	A
C-A	333	83			333				
A-B	185	46			185				
A-C	519	130			519				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	388	0.132	51	0.2	0.2	10.716	B
C-AB	6	1	681	0.008	6	0.0	0.0	5.335	A
C-A	280	70			280				
A-B	155	39			155				
A-C	435	109			435				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.03	0.31	1.12	1.43			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2029 + Committed Development, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Turners Hill Road / Sandy Lane	T-Junction	Two-way	Two-way	Two-way		1.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.98	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	Relationship type	Relationship
D7	2029 + Committed Development	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (N)		ONE HOUR	✓	468	100.000
B - Sandy Lane		ONE HOUR	✓	119	100.000
C - Turners Hill Road (S)		ONE HOUR	✓	523	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	87	381
	B - Sandy Lane	115	0	4
	C - Turners Hill Road (S)	520	2	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	15	4
	B - Sandy Lane	6	0	0
	C - Turners Hill Road (S)	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.40	18.24	0.7	3.1	C	109	164
C-AB	0.01	4.53	0.0	0.5	A	5	7
C-A						475	712
A-B						80	120
A-C						350	524

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	396	0.227	89	0.0	0.3	11.681	B
C-AB	3	0.79	800	0.004	3	0.0	0.0	4.516	A
C-A	390	98			390				
A-B	66	16			66				
A-C	287	72			287				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	367	0.292	107	0.3	0.4	13.781	B
C-AB	4	1	840	0.005	4	0.0	0.0	4.301	A
C-A	465	116			465				
A-B	78	20			78				
A-C	343	86			343				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	328	0.400	130	0.4	0.6	18.083	C
C-AB	7	2	897	0.007	6	0.0	0.0	4.033	A
C-A	569	142			569				
A-B	96	24			96				
A-C	420	105			420				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	328	0.400	131	0.6	0.7	18.243	C
C-AB	7	2	897	0.007	7	0.0	0.0	4.041	A
C-A	569	142			569				
A-B	96	24			96				
A-C	420	105			420				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	367	0.292	108	0.7	0.4	13.930	B
C-AB	4	1	840	0.005	4	0.0	0.0	4.322	A
C-A	465	116			465				
A-B	78	20			78				
A-C	343	86			343				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	396	0.227	90	0.4	0.3	11.804	B
C-AB	3	0.79	800	0.004	3	0.0	0.0	4.527	A
C-A	390	98			390				
A-B	66	16			66				
A-C	287	72			287				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.65	0.03	0.26	0.65	0.65			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.66	0.03	0.30	1.45	3.10			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.42	0.03	0.33	1.08	1.29			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2029 + Committed Development, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Turners Hill Road / Sandy Lane	T-Junction	Two-way	Two-way	Two-way		0.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.90	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	Relationship type	Relationship
D8	2029 + Committed Development	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (N)		ONE HOUR	✓	784	100.000
B - Sandy Lane		ONE HOUR	✓	68	100.000
C - Turners Hill Road (S)		ONE HOUR	✓	379	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	206	577
	B - Sandy Lane	63	0	5
	C - Turners Hill Road (S)	375	4	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	2	1
	B - Sandy Lane	3	0	0
	C - Turners Hill Road (S)	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.24	15.54	0.3	1.4	C	62	94
C-AB	0.02	5.34	0.0	0.5	A	8	12
C-A						340	509
A-B						189	284
A-C						530	795

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	388	0.132	51	0.0	0.2	10.664	B
C-AB	6	1	682	0.008	6	0.0	0.0	5.324	A
C-A	280	70			280				
A-B	155	39			155				
A-C	435	109			435				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	354	0.173	61	0.2	0.2	12.299	B
C-AB	8	2	699	0.011	7	0.0	0.0	5.200	A
C-A	333	83			333				
A-B	185	46			185				
A-C	519	130			519				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	306	0.244	74	0.2	0.3	15.488	C
C-AB	11	3	726	0.015	11	0.0	0.0	5.030	A
C-A	406	102			406				
A-B	227	57			227				
A-C	636	159			636				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	306	0.244	75	0.3	0.3	15.544	C
C-AB	11	3	726	0.015	11	0.0	0.0	5.039	A
C-A	406	102			406				
A-B	227	57			227				
A-C	636	159			636				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	354	0.173	62	0.3	0.2	12.346	B
C-AB	8	2	699	0.011	8	0.0	0.0	5.220	A
C-A	333	83			333				
A-B	185	46			185				
A-C	519	130			519				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	388	0.132	51	0.2	0.2	10.716	B
C-AB	6	1	681	0.008	6	0.0	0.0	5.335	A
C-A	280	70			280				
A-B	155	39			155				
A-C	435	109			435				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.03	0.31	1.12	1.43			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2029 + Committed Development + Development (350 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Turners Hill Road / Sandy Lane	T-Junction	Two-way	Two-way	Two-way		1.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.98	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	Relationship type	Relationship
D13	2029 + Committed Development + Development (350 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (N)		ONE HOUR	✓	468	100.000
B - Sandy Lane		ONE HOUR	✓	119	100.000
C - Turners Hill Road (S)		ONE HOUR	✓	523	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	87	381
	B - Sandy Lane	115	0	4
	C - Turners Hill Road (S)	520	2	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	15	4
	B - Sandy Lane	6	0	0
	C - Turners Hill Road (S)	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.40	18.24	0.7	3.1	C	109	164
C-AB	0.01	4.53	0.0	0.5	A	5	7
C-A						475	712
A-B						80	120
A-C						350	524

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	396	0.227	89	0.0	0.3	11.681	B
C-AB	3	0.79	800	0.004	3	0.0	0.0	4.516	A
C-A	390	98			390				
A-B	66	16			66				
A-C	287	72			287				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	367	0.292	107	0.3	0.4	13.781	B
C-AB	4	1	840	0.005	4	0.0	0.0	4.301	A
C-A	465	116			465				
A-B	78	20			78				
A-C	343	86			343				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	328	0.400	130	0.4	0.6	18.083	C
C-AB	7	2	897	0.007	6	0.0	0.0	4.033	A
C-A	569	142			569				
A-B	96	24			96				
A-C	420	105			420				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	328	0.400	131	0.6	0.7	18.243	C
C-AB	7	2	897	0.007	7	0.0	0.0	4.041	A
C-A	569	142			569				
A-B	96	24			96				
A-C	420	105			420				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	367	0.292	108	0.7	0.4	13.930	B
C-AB	4	1	840	0.005	4	0.0	0.0	4.322	A
C-A	465	116			465				
A-B	78	20			78				
A-C	343	86			343				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	396	0.227	90	0.4	0.3	11.804	B
C-AB	3	0.79	800	0.004	3	0.0	0.0	4.527	A
C-A	390	98			390				
A-B	66	16			66				
A-C	287	72			287				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.65	0.03	0.26	0.65	0.65			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.66	0.03	0.30	1.45	3.10			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.42	0.03	0.33	1.08	1.29			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2029 + Committed Development + Development (350 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Turners Hill Road / Sandy Lane	T-Junction	Two-way	Two-way	Two-way		0.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.90	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	Relationship type	Relationship
D14	2029 + Committed Development + Development (350 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (N)		ONE HOUR	✓	784	100.000
B - Sandy Lane		ONE HOUR	✓	68	100.000
C - Turners Hill Road (S)		ONE HOUR	✓	379	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	206	577
	B - Sandy Lane	63	0	5
	C - Turners Hill Road (S)	375	4	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	2	1
	B - Sandy Lane	3	0	0
	C - Turners Hill Road (S)	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.24	15.54	0.3	1.4	C	62	94
C-AB	0.02	5.34	0.0	0.5	A	8	12
C-A						340	509
A-B						189	284
A-C						530	795

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	388	0.132	51	0.0	0.2	10.664	B
C-AB	6	1	682	0.008	6	0.0	0.0	5.324	A
C-A	280	70			280				
A-B	155	39			155				
A-C	435	109			435				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	354	0.173	61	0.2	0.2	12.299	B
C-AB	8	2	699	0.011	7	0.0	0.0	5.200	A
C-A	333	83			333				
A-B	185	46			185				
A-C	519	130			519				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	306	0.244	74	0.2	0.3	15.488	C
C-AB	11	3	726	0.015	11	0.0	0.0	5.030	A
C-A	406	102			406				
A-B	227	57			227				
A-C	636	159			636				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	306	0.244	75	0.3	0.3	15.544	C
C-AB	11	3	726	0.015	11	0.0	0.0	5.039	A
C-A	406	102			406				
A-B	227	57			227				
A-C	636	159			636				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	354	0.173	62	0.3	0.2	12.346	B
C-AB	8	2	699	0.011	8	0.0	0.0	5.220	A
C-A	333	83			333				
A-B	185	46			185				
A-C	519	130			519				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	388	0.132	51	0.2	0.2	10.716	B
C-AB	6	1	681	0.008	6	0.0	0.0	5.335	A
C-A	280	70			280				
A-B	155	39			155				
A-C	435	109			435				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.03	0.31	1.12	1.43			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

2029 + Committed Development + Development (450 Homes), AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Turners Hill Road / Sandy Lane	T-Junction	Two-way	Two-way	Two-way		1.98	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	1.98	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	Relationship type	Relationship
D15	2029 + Committed Development + Development (450 Homes)	AM	ONE HOUR	07:00	08:30	15	✓	Simple	D3+D5

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (N)		ONE HOUR	✓	468	100.000
B - Sandy Lane		ONE HOUR	✓	119	100.000
C - Turners Hill Road (S)		ONE HOUR	✓	523	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	87	381
	B - Sandy Lane	115	0	4
	C - Turners Hill Road (S)	520	2	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	15	4
	B - Sandy Lane	6	0	0
	C - Turners Hill Road (S)	6	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.40	18.24	0.7	3.1	C	109	164
C-AB	0.01	4.53	0.0	0.5	A	5	7
C-A						475	712
A-B						80	120
A-C						350	524

Main Results for each time segment

07:00 - 07:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	396	0.227	89	0.0	0.3	11.681	B
C-AB	3	0.79	800	0.004	3	0.0	0.0	4.516	A
C-A	390	98			390				
A-B	66	16			66				
A-C	287	72			287				

07:15 - 07:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	367	0.292	107	0.3	0.4	13.781	B
C-AB	4	1	840	0.005	4	0.0	0.0	4.301	A
C-A	465	116			465				
A-B	78	20			78				
A-C	343	86			343				

07:30 - 07:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	328	0.400	130	0.4	0.6	18.083	C
C-AB	7	2	897	0.007	6	0.0	0.0	4.033	A
C-A	569	142			569				
A-B	96	24			96				
A-C	420	105			420				

07:45 - 08:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	131	33	328	0.400	131	0.6	0.7	18.243	C
C-AB	7	2	897	0.007	7	0.0	0.0	4.041	A
C-A	569	142			569				
A-B	96	24			96				
A-C	420	105			420				

08:00 - 08:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	107	27	367	0.292	108	0.7	0.4	13.930	B
C-AB	4	1	840	0.005	4	0.0	0.0	4.322	A
C-A	465	116			465				
A-B	78	20			78				
A-C	343	86			343				

08:15 - 08:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	90	22	396	0.227	90	0.4	0.3	11.804	B
C-AB	3	0.79	800	0.004	3	0.0	0.0	4.527	A
C-A	390	98			390				
A-B	66	16			66				
A-C	287	72			287				

Queue Variation Results for each time segment

07:00 - 07:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.29	0.00	0.00	0.29	0.29			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

07:15 - 07:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.40	0.00	0.00	0.40	0.40			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:30 - 07:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.65	0.03	0.26	0.65	0.65			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

07:45 - 08:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.66	0.03	0.30	1.45	3.10			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:00 - 08:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.42	0.03	0.33	1.08	1.29			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

08:15 - 08:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.30	0.03	0.26	0.47	0.50			N/A	N/A
C-AB	0.00	0.00	0.00	0.00	0.00			N/A	N/A

2029 + Committed Development + Development (450 Homes), PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Demand Set Relationship	D7 - 2029 + Committed Development, AM	Demand Set relationships are chained. This may slow down the file.
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

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	Turners Hill Road / Sandy Lane	T-Junction	Two-way	Two-way	Two-way		0.90	A

Junction Network

Driving side	Lighting	Network delay (s)	Network LOS
Left	Normal/unknown	0.90	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	Relationship type	Relationship
D16	2029 + Committed Development + Development (450 Homes)	PM	ONE HOUR	16:30	18:00	15	✓	Simple	D4+D6

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
A - Turners Hill Road (N)		ONE HOUR	✓	784	100.000
B - Sandy Lane		ONE HOUR	✓	68	100.000
C - Turners Hill Road (S)		ONE HOUR	✓	379	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	206	577
	B - Sandy Lane	63	0	5
	C - Turners Hill Road (S)	375	4	0

Vehicle Mix

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

Heavy Vehicle %

		To		
		A - Turners Hill Road (N)	B - Sandy Lane	C - Turners Hill Road (S)
From	A - Turners Hill Road (N)	0	2	1
	B - Sandy Lane	3	0	0
	C - Turners Hill Road (S)	4	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS	Average Demand (Veh/hr)	Total Junction Arrivals (Veh)
B-AC	0.24	15.54	0.3	1.4	C	62	94
C-AB	0.02	5.34	0.0	0.5	A	8	12
C-A						340	509
A-B						189	284
A-C						530	795

Main Results for each time segment

16:30 - 16:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	388	0.132	51	0.0	0.2	10.664	B
C-AB	6	1	682	0.008	6	0.0	0.0	5.324	A
C-A	280	70			280				
A-B	155	39			155				
A-C	435	109			435				

16:45 - 17:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	354	0.173	61	0.2	0.2	12.299	B
C-AB	8	2	699	0.011	7	0.0	0.0	5.200	A
C-A	333	83			333				
A-B	185	46			185				
A-C	519	130			519				

17:00 - 17:15

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	306	0.244	74	0.2	0.3	15.488	C
C-AB	11	3	726	0.015	11	0.0	0.0	5.030	A
C-A	406	102			406				
A-B	227	57			227				
A-C	636	159			636				

17:15 - 17:30

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	75	19	306	0.244	75	0.3	0.3	15.544	C
C-AB	11	3	726	0.015	11	0.0	0.0	5.039	A
C-A	406	102			406				
A-B	227	57			227				
A-C	636	159			636				

17:30 - 17:45

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	61	15	354	0.173	62	0.3	0.2	12.346	B
C-AB	8	2	699	0.011	8	0.0	0.0	5.220	A
C-A	333	83			333				
A-B	185	46			185				
A-C	519	130			519				

17:45 - 18:00

Stream	Total Demand (Veh/hr)	Junction Arrivals (Veh)	Capacity (Veh/hr)	RFC	Throughput (Veh/hr)	Start queue (Veh)	End queue (Veh)	Delay (s)	Unsignalised level of service
B-AC	51	13	388	0.132	51	0.2	0.2	10.716	B
C-AB	6	1	681	0.008	6	0.0	0.0	5.335	A
C-A	280	70			280				
A-B	155	39			155				
A-C	435	109			435				

Queue Variation Results for each time segment

16:30 - 16:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

16:45 - 17:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.01	0.25	0.45	0.48			N/A	N/A

17:00 - 17:15

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.03	0.26	0.47	0.49			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

17:15 - 17:30

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.32	0.03	0.31	1.12	1.43			N/A	N/A
C-AB	0.02	0.00	0.00	0.02	0.02			N/A	N/A

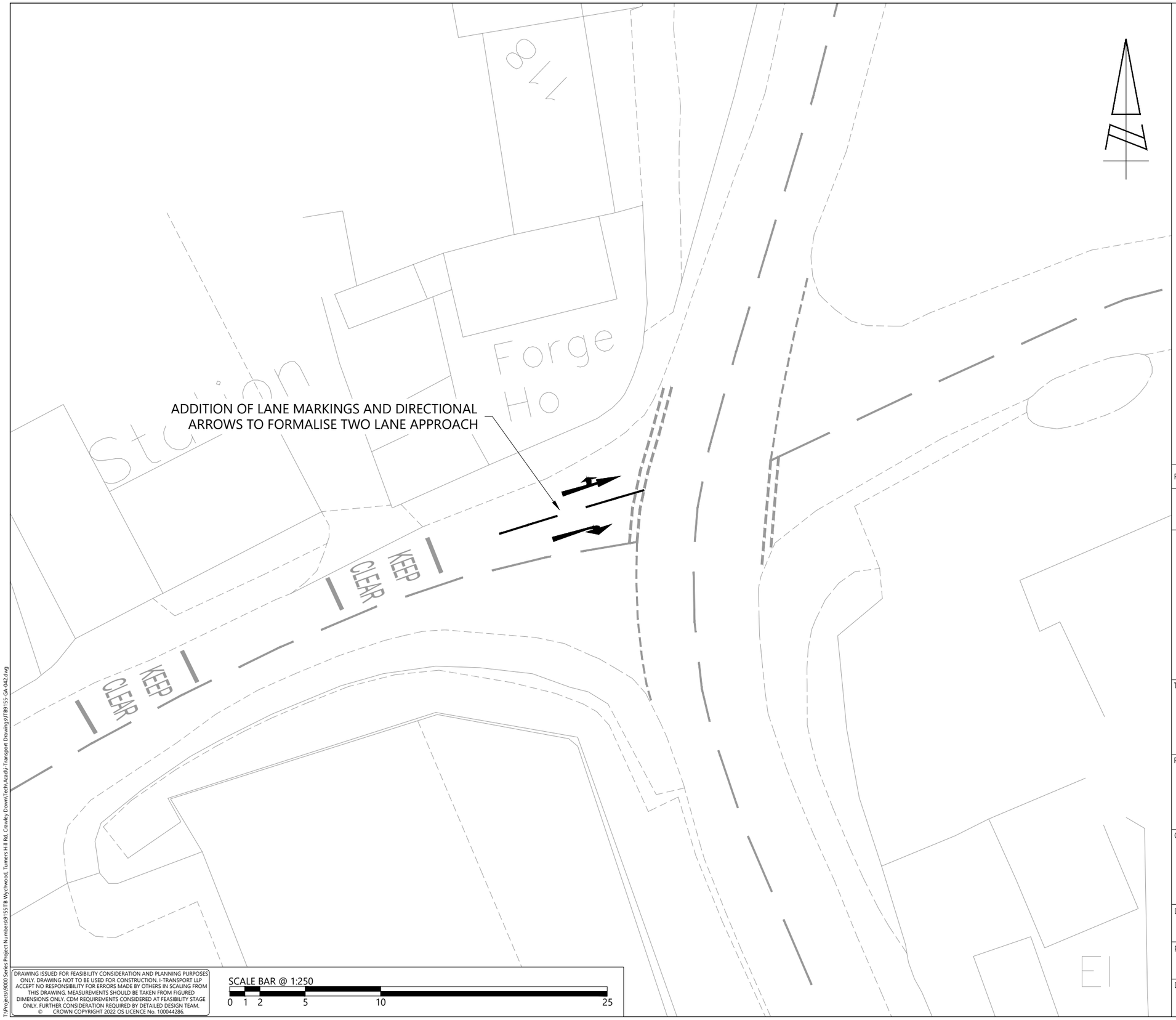
17:30 - 17:45

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.21	0.00	0.00	0.21	0.21			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

17:45 - 18:00

Stream	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
B-AC	0.15	0.00	0.00	0.15	0.15			N/A	N/A
C-AB	0.01	0.00	0.00	0.01	0.01			N/A	N/A

APPENDIX D. PROPOSED JUNCTION IMPROVEMENT AT B2028 / B2110 CROSSROAD



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SCALE BAR @ 1:250

0 1 2 5 10 25

T:\Projects\9000 Series Project Numbers\9155ITB Wychwood, Turners Hill Rd, Crawley Down\Tech\Acad\i-Transport Drawings\ITB9155-GA-042.dwg

REV	DATE	BY	DESCRIPTION	CHK	APD

STATUS: FOR INFORMATION

i-Transport

The Square, Basing View,
Basingstoke, Hampshire, RG21 4EB

Tel: 01256 898366

www.i-transport.co.uk

TITLE:

POTENTIAL AMENDMENTS TO B2028 NORTH STREET / B2110 CHURCH ROAD JUNCTION

PROJECT:

WYCHWOOD, TURNERS HILL ROAD, CRAWLEY DOWN

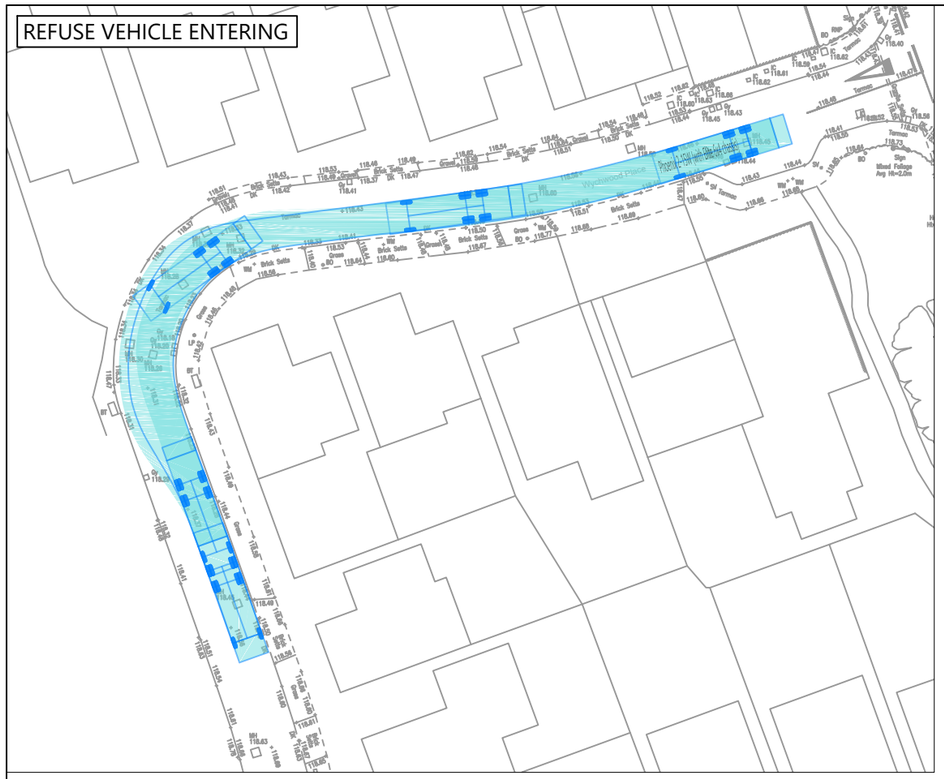
CLIENT:

WATES DEVELOPMENTS

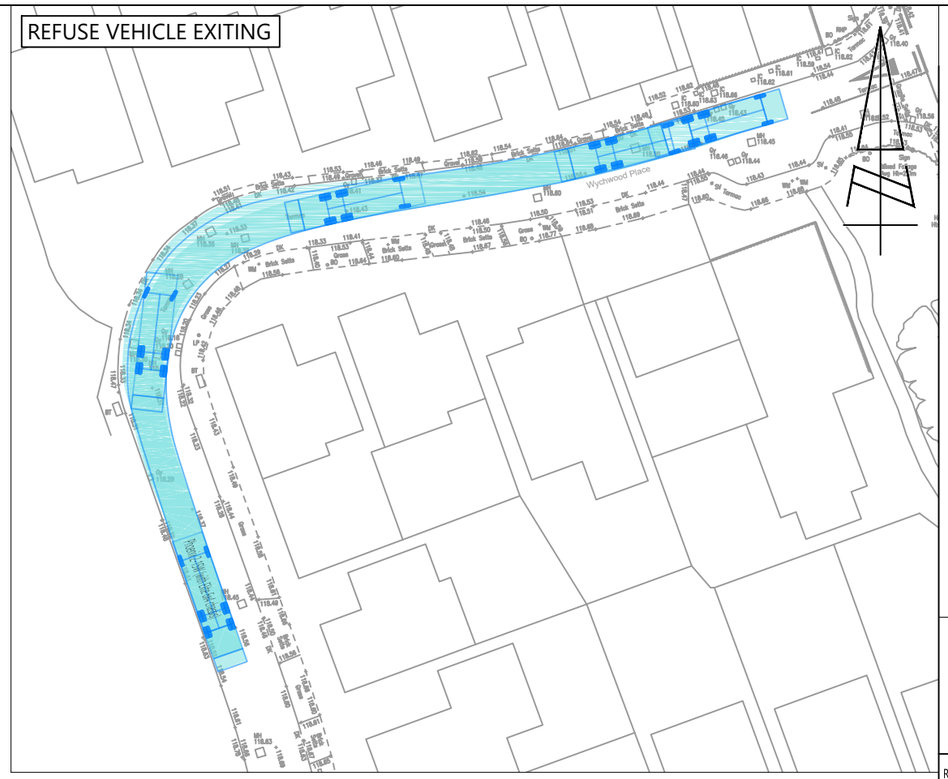
DRAWN:	CHECKED:	APPROVED:
JD	MS	JCB
PROJECT No:	**SCALE @ A3:**	**DATE:**
ITB9155	1:250	13.12.23
DRAWING No:		**REV:**
ITB9155-GA-042		-

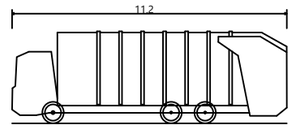
APPENDIX E. SWEPT PATH ANALYSIS AND VISIBLITY SPLAY

REFUSE VEHICLE ENTERING



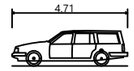
REFUSE VEHICLE EXITING





Phoenix 2-15W (with Elite 6x4 chassis)

Overall Length	11.200m
Overall Width	2.530m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	9.500m



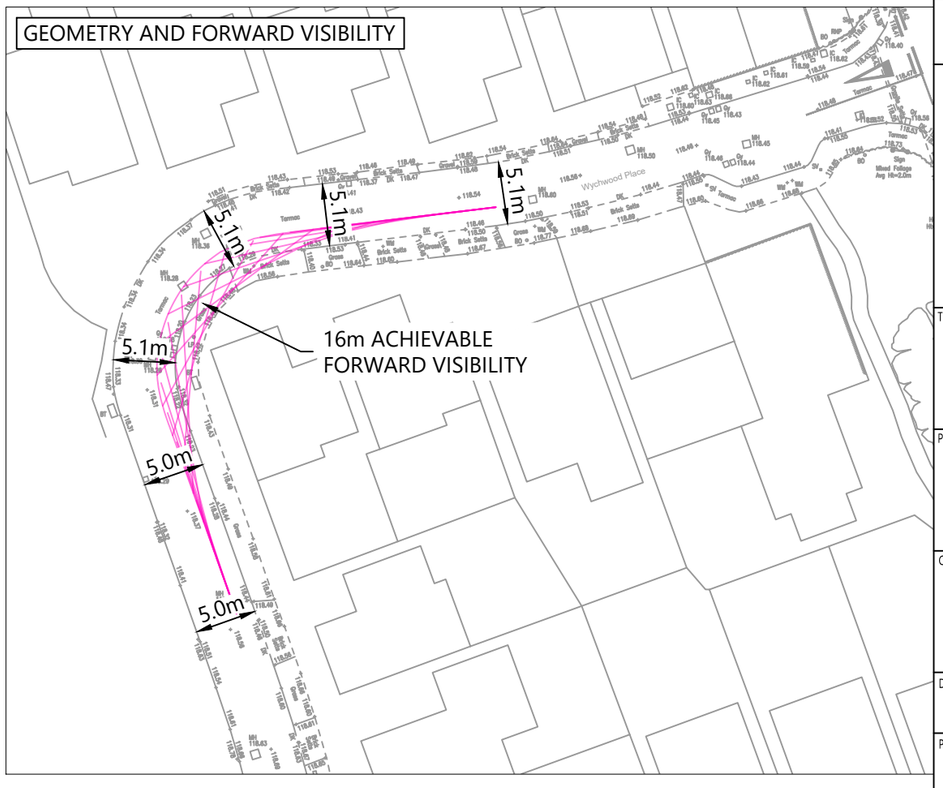
Estate Car

Overall Length	4.710m
Overall Width	1.804m
Overall Body Height	1.442m
Min Body Ground Clearance	0.207m
Max Track Width	1.756m
Lock to lock time	4.00s
Kerb to Kerb Turning Radius	5.950m

REV	DATE	BY	DESCRIPTION	CHK	APD
A	16.04.24	JD	VEHICLE TRACKS AMENDED	MS	MS

ESTATE CAR ENTERING WITH ESTATE CAR EXITING

GEOMETRY AND FORWARD VISIBILITY



DRAWING ISSUED FOR FEASIBILITY CONSIDERATION AND PLANNING PURPOSES ONLY. DRAWING NOT TO BE USED FOR CONSTRUCTION. I-TRANSPORT LLP ACCEPT NO RESPONSIBILITY FOR ERRORS MADE BY OTHERS IN SCALING FROM THIS DRAWING. MEASUREMENTS SHOULD BE TAKEN FROM FIGURED DIMENSIONS ONLY. CDM REQUIREMENTS CONSIDERED AT FEASIBILITY STAGE ONLY. FURTHER CONSIDERATION REQUIRED BY DETAILED DESIGN TEAM.
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SCALE BAR @ 1:500

0 5 10 25 50

i-Transport
The Square, Basing View,
Basingstoke, Hampshire, RG21 4EB
Tel: 01256 898366
www.i-transport.co.uk

STATUS: FOR INFORMATION

TITLE: SWEPT PATH ANALYSIS - REFUSE VEHICLE & ESTATE CAR

PROJECT: WYCHWOOD, TURNERS HILL ROAD, CRAWLEY DOWN

CLIENT: WATES DEVELOPMENTS

DRAWN:	CHECKED:	APPROVED:
JD	MS	MS
PROJECT No:	SCALE @ A3:	DATE:
ITB9155	1:500	26.03.24
DRAWING No:		REV:
ITB9155-GA-049		A

T:\Projects\9000 Series Project Numbers\9155\FB Wychwood, Turners Hill Rd, Crawley Down\Tech\Acad\i-Transport Drawings\ITB9155-GA-049A.dwg

APPENDIX F. AGREED TRIP RATES

Filtering Summary

Land Use	03/A	RESIDENTIAL/HOUSES PRIVATELY OWNED
Selected Trip Rate Calculation Parameter Range	6-4334 DWELLS	
Actual Trip Rate Calculation Parameter Range	10-918 DWELLS	
Date Range	Minimum: 01/01/13	Maximum: 16/06/21
Parking Spaces Range	All Surveys Included	
Parking Spaces Per Dwelling Range:	All Surveys Included	
Bedrooms Per Dwelling Range:	All Surveys Included	
Percentage of dwellings privately owned:	All Surveys Included	
Days of the week selected	Monday	13
	Tuesday	8
	Wednesday	16
	Thursday	13
	Friday	8
Main Location Types selected	Suburban Area (PPS6 Out of Centre)	18
	Edge of Town	40
Population within 500m	All Surveys Included	
Population <1 Mile ranges selected	1,000 or Less	1
	1,001 to 5,000	6
	5,001 to 10,000	16
	10,001 to 15,000	18
	15,001 to 20,000	7
	20,001 to 25,000	5
	25,001 to 50,000	5
Population <5 Mile ranges selected	5,001 to 25,000	6
	25,001 to 50,000	7
	50,001 to 75,000	8
	75,001 to 100,000	12
	100,001 to 125,000	1
	125,001 to 250,000	16
	250,001 to 500,000	8
Car Ownership <5 Mile ranges selected	0.6 to 1.0	15
	1.1 to 1.5	41
	1.6 to 2.0	2
PTAL Rating	No PTAL Present	57
	2 Poor	1

Calculation Reference: AUDIT-236601-211123-1140

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

Selected regions and areas:

02	SOUTH EAST		
	ES	EAST SUSSEX	3 days
	EX	ESSEX	1 days
	HC	HAMPSHIRE	3 days
	HF	HERTFORDSHIRE	1 days
	KC	KENT	4 days
	SC	SURREY	2 days
	WS	WEST SUSSEX	5 days
03	SOUTH WEST		
	DC	DORSET	1 days
	DV	DEVON	3 days
	SM	SOMERSET	1 days
	WL	WILTSHIRE	1 days
04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	7 days
	SF	SUFFOLK	2 days
05	EAST MIDLANDS		
	DS	DERBYSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	2 days
	ST	STAFFORDSHIRE	2 days
	WK	WARWICKSHIRE	3 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NE	NORTH EAST LINCOLNSHIRE	1 days
	NY	NORTH YORKSHIRE	5 days
	SY	SOUTH YORKSHIRE	1 days
08	NORTH WEST		
	CH	CHESHIRE	3 days
	LC	LANCASHIRE	1 days
	MS	MERSEYSIDE	1 days
09	NORTH		
	DH	DURHAM	2 days
	TW	TYNE & WEAR	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: 10 to 918 (units:)
Range Selected by User: 6 to 4334 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

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 16/06/21

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	13 days
Tuesday	8 days
Wednesday	16 days
Thursday	13 days
Friday	8 days

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

Selected survey types:

Manual count	55 days
Directional ATC Count	3 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)	18
Edge of Town	40

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	55
Out of Town	1
No Sub Category	2

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	58 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	1 days
1,001 to 5,000	6 days
5,001 to 10,000	16 days
10,001 to 15,000	18 days
15,001 to 20,000	7 days
20,001 to 25,000	5 days
25,001 to 50,000	5 days

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

Population within 5 miles:

5,001 to 25,000	6 days
25,001 to 50,000	7 days
50,001 to 75,000	8 days
75,001 to 100,000	12 days
100,001 to 125,000	1 days
125,001 to 250,000	16 days
250,001 to 500,000	8 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	15 days
1.1 to 1.5	41 days
1.6 to 2.0	2 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	18 days
No	40 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	57 days
2 Poor	1 days

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

LIST OF SITES relevant to selection parameters

1 CA-03-A-05 DETACHED HOUSES CAMBRIDGESHIRE
EASTFIELD ROAD
PETERBOROUGH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 28
Survey date: MONDAY *17/10/16* *Survey Type: MANUAL*

2 CH-03-A-09 TERRACED HOUSES CHESHIRE
GREYSTOKE ROAD
MACCLESFIELD
HURDSFIELD
Edge of Town
Residential Zone
Total No of Dwellings: 24
Survey date: MONDAY *24/11/14* *Survey Type: MANUAL*

3 CH-03-A-10 SEMI-DETACHED & TERRACED CHESHIRE
MEADOW DRIVE
NORTHWICH
BARNTON
Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: TUESDAY *04/06/19* *Survey Type: MANUAL*

4 CH-03-A-11 TOWN HOUSES CHESHIRE
LONDON ROAD
NORTHWICH
LEFTWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 24
Survey date: THURSDAY *06/06/19* *Survey Type: MANUAL*

5 DC-03-A-08 BUNGALOWS DORSET
HURSTDENE ROAD
BOURNEMOUTH
CASTLE LANE WEST
Edge of Town
Residential Zone
Total No of Dwellings: 28
Survey date: MONDAY *24/03/14* *Survey Type: MANUAL*

6 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*

7 DH-03-A-03 SEMI-DETACHED & TERRACED DURHAM
PILGRIMS WAY
DURHAM

Edge of Town
Residential Zone
Total No of Dwellings: 57
Survey date: FRIDAY *19/10/18* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

8 DS-03-A-02 MIXED HOUSES DERBYSHIRE
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total No of Dwellings: 371
Survey date: TUESDAY *10/07/18* *Survey Type: MANUAL*

9 DV-03-A-01 TERRACED HOUSES DEVON
BRONSHILL ROAD
TORQUAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 37
Survey date: WEDNESDAY *30/09/15* *Survey Type: MANUAL*

10 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*

11 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*

12 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: MONDAY *11/07/16* *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 ES-03-A-05 MIXED HOUSES & FLATS EAST SUSSEX
RATTLE ROAD
NEAR EASTBOURNE
STONE CROSS
Edge of Town
Residential Zone
Total No of Dwellings: 99
Survey date: WEDNESDAY *05/06/19* *Survey Type: MANUAL*

15 EX-03-A-02 DETACHED & SEMI-DETACHED ESSEX
MANOR ROAD
CHIGWELL
GRANGE HILL
Edge of Town
Residential Zone
Total No of Dwellings: 97
Survey date: MONDAY *27/11/17* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

16 HC-03-A-21 TERRACED & SEMI-DETACHED HAMPSHIRE
PRIESTLEY ROAD
BASINGSTOKE
HOUNDMILLS
Edge of Town
Residential Zone
Total No of Dwellings: 39
Survey date: TUESDAY *13/11/18* *Survey Type: MANUAL*

17 HC-03-A-22 MIXED HOUSES HAMPSHIRE
BOW LAKE GARDENS
NEAR EASTLEIGH
BISHOPSTOKE
Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: WEDNESDAY *31/10/18* *Survey Type: MANUAL*

18 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*

19 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*

20 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*

21 KC-03-A-04 SEMI-DETACHED & TERRACED KENT
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

22 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*

LIST OF SITES relevant to selection parameters (Cont.)

23 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*

24 LC-03-A-31 DETACHED HOUSES LANCASHIRE
GREENSIDE
PRESTON
COTTAM
Edge of Town
Residential Zone
Total No of Dwellings: 32
Survey date: FRIDAY *17/11/17* *Survey Type: MANUAL*

25 MS-03-A-03 DETACHED MERSEYSIDE
BEMPTON ROAD
LIVERPOOL
OTTERSPOOL
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 15
Survey date: FRIDAY *21/06/13* *Survey Type: MANUAL*

26 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*

27 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY
THETFORD

Edge of Town
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY *16/09/15* *Survey Type: MANUAL*

28 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*

29 NF-03-A-05 MIXED HOUSES NORFOLK
HEATH DRIVE
HOLT

Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: THURSDAY *19/09/19* *Survey Type: MANUAL*

30 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*

LIST OF SITES relevant to selection parameters (Cont.)

31 NF-03-A-07 MIXED HOUSES & FLATS NORFOLK
SILFIELD ROAD
WYMONDHAM

Edge of Town
Out of Town
Total No of Dwellings: 297
Survey date: FRIDAY *20/09/19* *Survey Type: DIRECTIONAL ATC COUNT*

32 NF-03-A-10 MIXED HOUSES & FLATS NORFOLK
HUNSTANTON ROAD
HUNSTANTON

Edge of Town
Residential Zone
Total No of Dwellings: 17
Survey date: WEDNESDAY *12/09/18* *Survey Type: DIRECTIONAL ATC COUNT*

33 NF-03-A-16 MIXED HOUSES & FLATS NORFOLK
NORWICH COMMON
WYMONDHAM

Edge of Town
Residential Zone
Total No of Dwellings: 138
Survey date: TUESDAY *20/10/15* *Survey Type: DIRECTIONAL ATC COUNT*

34 NY-03-A-08 TERRACED HOUSES NORTH YORKSHIRE
NICHOLAS STREET
YORK

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 21
Survey date: MONDAY *16/09/13* *Survey Type: MANUAL*

35 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*

36 NY-03-A-10 HOUSES AND FLATS NORTH YORKSHIRE
BOROUGHBRIDGE ROAD
RIPON

Edge of Town
No Sub Category
Total No of Dwellings: 71
Survey date: TUESDAY *17/09/13* *Survey Type: MANUAL*

37 NY-03-A-11 PRIVATE HOUSING NORTH YORKSHIRE
HORSEFAIR
BOROUGHBRIDGE

Edge of Town
Residential Zone
Total No of Dwellings: 23
Survey date: WEDNESDAY *18/09/13* *Survey Type: MANUAL*

38 NY-03-A-13 TERRACED HOUSES NORTH YORKSHIRE
CATTERICK ROAD
CATTERICK GARRISON
OLD HOSPITAL COMPOUND
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY *10/05/17* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

39 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*

40 SC-03-A-05 MIXED HOUSES SURREY
REIGATE ROAD
HORLEY

Edge of Town
Residential Zone
Total No of Dwellings: 207
Survey date: MONDAY *01/04/19* *Survey Type: MANUAL*

41 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE
BURY ST EDMUNDS

Edge of Town
Residential Zone
Total No of Dwellings: 18
Survey date: WEDNESDAY *09/09/15* *Survey Type: MANUAL*

42 SF-03-A-07 MIXED HOUSES SUFFOLK
FOXHALL ROAD
IPSWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 73
Survey date: THURSDAY *09/05/19* *Survey Type: MANUAL*

43 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*

44 SH-03-A-06 BUNGALOWS SHROPSHIRE
ELLESMERE ROAD
SHREWSBURY

Edge of Town
Residential Zone
Total No of Dwellings: 16
Survey date: THURSDAY *22/05/14* *Survey Type: MANUAL*

45 SM-03-A-01 DETACHED & SEMI SOMERSET
WEMBDON ROAD
BRIDGWATER
NORTHFIELD
Edge of Town
Residential Zone
Total No of Dwellings: 33
Survey date: THURSDAY *24/09/15* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

46 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

47 ST-03-A-08 DETACHED HOUSES STAFFORDSHIRE
SILKMORE CRESCENT
STAFFORD
MEADOWCROFT PARK
Edge of Town
Residential Zone
Total No of Dwellings: 26
Survey date: WEDNESDAY 22/11/17 Survey Type: MANUAL

48 SY-03-A-01 SEMI DETACHED HOUSES SOUTH YORKSHIRE
A19 BENTLEY ROAD
DONCASTER
BENTLEY RISE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 54
Survey date: WEDNESDAY 18/09/13 Survey Type: MANUAL

49 TW-03-A-02 SEMI-DETACHED TYNE & WEAR
WEST PARK ROAD
GATESHEAD

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 16
Survey date: MONDAY 07/10/13 Survey Type: MANUAL

50 WK-03-A-02 BUNGALOWS WARWICKSHIRE
NARBERTH WAY
COVENTRY
POTTERS GREEN
Edge of Town
Residential Zone
Total No of Dwellings: 17
Survey date: THURSDAY 17/10/13 Survey Type: MANUAL

51 WK-03-A-03 DETACHED HOUSES WARWICKSHIRE
BRESE AVENUE
WARWICK
GUYS CLIFFE
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 23
Survey date: WEDNESDAY 25/09/19 Survey Type: MANUAL

52 WK-03-A-04 DETACHED HOUSES WARWICKSHIRE
DALEHOUSE LANE
KENILWORTH

Edge of Town
Residential Zone
Total No of Dwellings: 49
Survey date: FRIDAY 27/09/19 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

53 WL-03-A-02 SEMI DETACHED WILTSHIRE
HEADLANDS GROVE
SWINDON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 27
Survey date: THURSDAY *22/09/16* *Survey Type: MANUAL*

54 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*

55 WS-03-A-08 MIXED HOUSES WEST SUSSEX
ROUNDSTONE LANE
ANGMERING

Edge of Town
Residential Zone
Total No of Dwellings: 180
Survey date: THURSDAY *19/04/18* *Survey Type: MANUAL*

56 WS-03-A-09 MIXED HOUSES & FLATS WEST SUSSEX
LITTLEHAMPTON ROAD
WORTHING
WEST DURRINGTON
Edge of Town
Residential Zone
Total No of Dwellings: 197
Survey date: THURSDAY *05/07/18* *Survey Type: MANUAL*

57 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*

58 WS-03-A-11 MIXED HOUSES WEST SUSSEX
ELLIS ROAD
WEST HORSHAM
S BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total No of Dwellings: 918
Survey date: TUESDAY *02/04/19* *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.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
BD-03-A-03	Covid
HF-03-A-04	Covid
NF-03-A-22	Covid
WO-03-A-07	Covid
WS-03-A-12	Covid

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
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	58	111	0.080	58	111	0.312	58	111	0.392
08:00 - 09:00	58	111	0.133	58	111	0.390	58	111	0.523
09:00 - 10:00	58	111	0.145	58	111	0.171	58	111	0.316
10:00 - 11:00	58	111	0.125	58	111	0.156	58	111	0.281
11:00 - 12:00	58	111	0.130	58	111	0.145	58	111	0.275
12:00 - 13:00	58	111	0.157	58	111	0.148	58	111	0.305
13:00 - 14:00	58	111	0.159	58	111	0.154	58	111	0.313
14:00 - 15:00	58	111	0.161	58	111	0.192	58	111	0.353
15:00 - 16:00	58	111	0.270	58	111	0.180	58	111	0.450
16:00 - 17:00	58	111	0.287	58	111	0.167	58	111	0.454
17:00 - 18:00	58	111	0.356	58	111	0.161	58	111	0.517
18:00 - 19:00	58	111	0.303	58	111	0.172	58	111	0.475
19:00 - 20:00	1	97	0.062	1	97	0.052	1	97	0.114
20:00 - 21:00	1	97	0.031	1	97	0.021	1	97	0.052
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.399			2.421			4.820

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.*

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Parameter summary

Trip rate parameter range selected:	10 - 918 (units:)
Survey date date range:	01/01/13 - 16/06/21
Number of weekdays (Monday-Friday):	62
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	12
Surveys manually removed from selection:	5

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.

APPENDIX G. MULTI-MODAL TRIP RATES

i-Transport The Square Basingstoke Licence No: 236601

Calculation Reference: AUDIT-236601-240327-0359

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		
	CT	CENTRAL BEDFORDSHIRE	1 days
	ES	EAST SUSSEX	5 days
	EX	ESSEX	1 days
	HC	HAMPSHIRE	9 days
	HF	HERTFORDSHIRE	2 days
	KC	KENT	7 days
	MW	MEDWAY	1 days
	SC	SURREY	2 days
	SP	SOUTHAMPTON	1 days
	WB	WEST BERKSHIRE	1 days
	WS	WEST SUSSEX	7 days
03	SOUTH WEST		
	DC	DORSET	2 days
	DV	DEVON	2 days
	SD	SWINDON	1 days
	SM	SOMERSET	1 days
	TB	TORBAY	1 days
04	EAST ANGLIA		
	NF	NORFOLK	17 days
	PB	PETERBOROUGH	1 days
	SF	SUFFOLK	3 days
05	EAST MIDLANDS		
	DY	DERBY	1 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	ST	STAFFORDSHIRE	1 days
	WK	WARWICKSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	NY	NORTH YORKSHIRE	2 days
08	NORTH WEST		
	AC	CHESHIRE WEST & CHESTER	1 days
09	NORTH		
	DH	DURHAM	2 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:	8 to 1146 (units:)
Range Selected by User:	6 to 1817 (units:)

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

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: 01/01/15 to 04/07/23

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	12 days
Tuesday	19 days
Wednesday	23 days
Thursday	13 days
Friday	7 days

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

Selected survey types:

Manual count	74 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)	13
Edge of Town	61

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	66
Village	1
Out of Town	4
No Sub Category	3

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.

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	26 days - Selected
Servicing vehicles Excluded	58 days - Selected

Secondary Filtering selection:

Use Class:

C3	74 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 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:

1,001 to 5,000	5 days
5,001 to 10,000	20 days
10,001 to 15,000	24 days
15,001 to 20,000	11 days
20,001 to 25,000	10 days
25,001 to 50,000	4 days

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

Population within 5 miles:

5,001 to 25,000	10 days
25,001 to 50,000	9 days
50,001 to 75,000	12 days
75,001 to 100,000	9 days
100,001 to 125,000	2 days
125,001 to 250,000	27 days
250,001 to 500,000	5 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	18 days
1.1 to 1.5	51 days
1.6 to 2.0	5 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	48 days
No	26 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	74 days

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

Covid-19 Restrictions	Yes	At least one survey within the selected data set was undertaken at a time of Covid-19 restrictions

LIST OF SITES relevant to selection parameters

1 AC-03-A-04 TOWN HOUSES CHESHIRE WEST & CHESTER
LONDON ROAD
NORTHWICH
LEFTWICH
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 24
Survey date: THURSDAY *06/06/19* *Survey Type: MANUAL*

2 CT-03-A-01 MIXED HOUSES CENTRAL BEDFORDSHIRE
ARLESEY ROAD
STOTFOLD

Edge of Town
Residential Zone
Total No of Dwellings: 46
Survey date: WEDNESDAY *22/06/22* *Survey Type: MANUAL*

3 DC-03-A-09 MIXED HOUSES DORSET
A350
SHAFTESBURY

Edge of Town
No Sub Category
Total No of Dwellings: 50
Survey date: FRIDAY *19/11/21* *Survey Type: MANUAL*

4 DC-03-A-10 MIXED HOUSES DORSET
ADDISON CLOSE
GILLINGHAM

Edge of Town
Residential Zone
Total No of Dwellings: 26
Survey date: WEDNESDAY *09/11/22* *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 DH-03-A-03 SEMI-DETACHED & TERRACED DURHAM
PILGRIMS WAY
DURHAM

Edge of Town
Residential Zone
Total No of Dwellings: 57
Survey date: FRIDAY *19/10/18* *Survey Type: MANUAL*

7 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*

LIST OF SITES relevant to selection parameters (Cont.)

8 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*

9 DY-03-A-01 MIXED HOUSES DERBY
RADBOURNE LANE
DERBY

Edge of Town
Residential Zone
Total No of Dwellings: 371
Survey date: TUESDAY *10/07/18* *Survey Type: MANUAL*

10 ES-03-A-03 MIXED HOUSES & FLATS EAST SUSSEX
SHEPHAM LANE
POLEGATE

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: MONDAY *11/07/16* *Survey Type: MANUAL*

11 ES-03-A-05 MIXED HOUSES & FLATS EAST SUSSEX
RATTLE ROAD
NEAR EASTBOURNE
STONE CROSS
Edge of Town
Residential Zone
Total No of Dwellings: 99
Survey date: WEDNESDAY *05/06/19* *Survey Type: MANUAL*

12 ES-03-A-07 MIXED HOUSES & FLATS EAST SUSSEX
NEW ROAD
HAILSHAM
HELLINGLY
Edge of Town
Residential Zone
Total No of Dwellings: 91
Survey date: THURSDAY *07/11/19* *Survey Type: MANUAL*

13 ES-03-A-08 MIXED HOUSES & FLATS EAST SUSSEX
WRESTWOOD ROAD
BEXHILL

Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date: WEDNESDAY *12/10/22* *Survey Type: MANUAL*

14 ES-03-A-09 DETACHED & SEMI-DETACHED EAST SUSSEX
THE FAIRWAY
NEWHAVEN

Edge of Town
Residential Zone
Total No of Dwellings: 47
Survey date: MONDAY *13/03/23* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

15 EX-03-A-03 MIXED HOUSES ESSEX
KESTREL GROVE
RAYLEIGH

Edge of Town
Residential Zone
Total No of Dwellings: 123
Survey date: MONDAY *27/09/21* *Survey Type: MANUAL*

16 HC-03-A-21 TERRACED & SEMI-DETACHED HAMPSHIRE
PRIESTLEY ROAD
BASINGSTOKE
HOUNDMILLS
Edge of Town
Residential Zone
Total No of Dwellings: 39
Survey date: TUESDAY *13/11/18* *Survey Type: MANUAL*

17 HC-03-A-22 MIXED HOUSES HAMPSHIRE
BOW LAKE GARDENS
NEAR EASTLEIGH
BISHOPSTOKE
Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: WEDNESDAY *31/10/18* *Survey Type: MANUAL*

18 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*

19 HC-03-A-24 MIXED HOUSES & FLATS HAMPSHIRE
STONEHAM LANE
EASTLEIGH

Edge of Town
Residential Zone
Total No of Dwellings: 243
Survey date: WEDNESDAY *10/11/21* *Survey Type: MANUAL*

20 HC-03-A-26 MIXED HOUSES & FLATS HAMPSHIRE
BOTLEY ROAD
WHITELEY

Edge of Town
Out of Town
Total No of Dwellings: 270
Survey date: THURSDAY *24/06/21* *Survey Type: MANUAL*

21 HC-03-A-27 MIXED HOUSES HAMPSHIRE
DAIRY ROAD
ANDOVER

Edge of Town
Residential Zone
Total No of Dwellings: 73
Survey date: TUESDAY *16/11/21* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

22 HC-03-A-28 MIXED HOUSES & FLATS HAMPSHIRE
EAGLE AVENUE
WATERLOOVILLE
LOVEDEAN
Edge of Town
Residential Zone
Total No of Dwellings: 125
Survey date: MONDAY *08/11/21* *Survey Type: MANUAL*

23 HC-03-A-31 MIXED HOUSES & FLATS HAMPSHIRE
KILN ROAD
LIPHOOK

Edge of Town
Residential Zone
Total No of Dwellings: 44
Survey date: FRIDAY *07/10/22* *Survey Type: MANUAL*

24 HC-03-A-33 MIXED HOUSES & FLATS HAMPSHIRE
CROW LANE
RINGWOOD
CROW
Edge of Town
Residential Zone
Total No of Dwellings: 195
Survey date: TUESDAY *04/07/23* *Survey Type: MANUAL*

25 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*

26 HF-03-A-04 TERRACED HOUSES HERTFORDSHIRE
HOLMSIDE RISE
WATFORD
SOUTH OXHEY
Edge of Town
Residential Zone
Total No of Dwellings: 8
Survey date: TUESDAY *08/06/21* *Survey Type: MANUAL*

27 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*

28 KC-03-A-04 SEMI-DETACHED & TERRACED KENT
KILN BARN ROAD
AYLESFORD
DITTON
Edge of Town
Residential Zone
Total No of Dwellings: 110
Survey date: FRIDAY *22/09/17* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

29 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*

30 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*

31 KC-03-A-09 MIXED HOUSES & FLATS KENT
WESTERN LINK
FAVERSHAM
DAVINGTON
Edge of Town
Residential Zone
Total No of Dwellings: 14
Survey date: WEDNESDAY *09/06/21* *Survey Type: MANUAL*

32 KC-03-A-10 MIXED HOUSES KENT
HEADCORN ROAD
STAPLEHURST

Edge of Town
Residential Zone
Total No of Dwellings: 106
Survey date: TUESDAY *09/05/23* *Survey Type: MANUAL*

33 KC-03-A-11 MIXED HOUSES & FLATS KENT
COLDHARBOUR ROAD
GRAVESEND

Edge of Town
No Sub Category
Total No of Dwellings: 375
Survey date: MONDAY *20/03/23* *Survey Type: MANUAL*

34 MW-03-A-02 MIXED HOUSES MEDWAY
OTTERHAM QUAY LANE
RAINHAM

Edge of Town
Residential Zone
Total No of Dwellings: 19
Survey date: MONDAY *06/06/22* *Survey Type: MANUAL*

35 NF-03-A-03 DETACHED HOUSES NORFOLK
HALING WAY
THETFORD

Edge of Town
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY *16/09/15* *Survey Type: MANUAL*

36 NF-03-A-05 MIXED HOUSES NORFOLK
HEATH DRIVE
HOLT

Edge of Town
Residential Zone
Total No of Dwellings: 40
Survey date: THURSDAY *19/09/19* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

37 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

38 NF-03-A-09 MIXED HOUSES & FLATS NORFOLK
ROUND HOUSE WAY
NORWICH
CRINGLEFORD
Edge of Town
Residential Zone
Total No of Dwellings: 984
Survey date: TUESDAY 24/09/19 Survey Type: MANUAL

39 NF-03-A-23 MIXED HOUSES & FLATS NORFOLK
SILFIELD ROAD
WYMONDHAM

Edge of Town
Out of Town
Total No of Dwellings: 514
Survey date: WEDNESDAY 22/09/21 Survey Type: MANUAL

40 NF-03-A-25 MIXED HOUSES & FLATS NORFOLK
WOODFARM LANE
GORLESTON-ON-SEA

Edge of Town
Residential Zone
Total No of Dwellings: 55
Survey date: TUESDAY 21/09/21 Survey Type: MANUAL

41 NF-03-A-28 MIXED HOUSES & FLATS NORFOLK
ATLANTIC AVENUE
NORWICH
SPROWSTON
Edge of Town
Residential Zone
Total No of Dwellings: 1146
Survey date: THURSDAY 22/09/22 Survey Type: MANUAL

42 NF-03-A-30 MIXED HOUSES NORFOLK
BRANDON ROAD
SWAFFHAM

Edge of Town
Residential Zone
Total No of Dwellings: 266
Survey date: THURSDAY 23/09/21 Survey Type: MANUAL

43 NF-03-A-33 MIXED HOUSES NORFOLK
LONDON ROAD
ATTLEBOROUGH

Edge of Town
Residential Zone
Total No of Dwellings: 143
Survey date: THURSDAY 29/09/22 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

44 NF-03-A-34 MIXED HOUSES NORFOLK
NORWICH ROAD
SWAFFHAM

Edge of Town
Out of Town
Total No of Dwellings: 80
Survey date: TUESDAY *27/09/22* *Survey Type: MANUAL*

45 NF-03-A-35 MIXED HOUSES & FLATS NORFOLK
REPTON AVENUE
NORWICH

Edge of Town
Residential Zone
Total No of Dwellings: 116
Survey date: WEDNESDAY *28/09/22* *Survey Type: MANUAL*

46 NF-03-A-36 MIXED HOUSES NORFOLK
LONDON ROAD
WYMONDHAM

Edge of Town
No Sub Category
Total No of Dwellings: 75
Survey date: THURSDAY *29/09/22* *Survey Type: MANUAL*

47 NF-03-A-37 MIXED HOUSES NORFOLK
GREENFIELDS ROAD
DEREHAM

Edge of Town
Residential Zone
Total No of Dwellings: 44
Survey date: TUESDAY *27/09/22* *Survey Type: MANUAL*

48 NF-03-A-38 MIXED HOUSES NORFOLK
BEAUFORT WAY
GREAT YARMOUTH
BRADWELL
Edge of Town
Residential Zone
Total No of Dwellings: 537
Survey date: TUESDAY *20/09/22* *Survey Type: MANUAL*

49 NF-03-A-39 MIXED HOUSES NORFOLK
HEATH DRIVE
HOLT

Edge of Town
Residential Zone
Total No of Dwellings: 212
Survey date: TUESDAY *27/09/22* *Survey Type: MANUAL*

50 NF-03-A-46 MIXED HOUSES & FLATS NORFOLK
BURGH ROAD
AYLSHAM

Edge of Town
Residential Zone
Total No of Dwellings: 300
Survey date: TUESDAY *14/09/21* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

51 NF-03-A-51 SEMI-DETACHED NORFOLK
CITY ROAD
NORWICH
LAKENHAM
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 34
Survey date: TUESDAY *13/09/22* *Survey Type: MANUAL*

52 NT-03-A-08 DETACHED HOUSES NOTTINGHAMSHIRE
WIGHAY ROAD
HUCKNALL

Edge of Town
Residential Zone
Total No of Dwellings: 36
Survey date: MONDAY *18/10/21* *Survey Type: MANUAL*

53 NY-03-A-13 TERRACED HOUSES NORTH YORKSHIRE
CATTERICK ROAD
CATTERICK GARRISON
OLD HOSPITAL COMPOUND
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 10
Survey date: WEDNESDAY *10/05/17* *Survey Type: MANUAL*

54 NY-03-A-14 DETACHED & BUNGALOWS NORTH YORKSHIRE
PALACE ROAD
RIPON

Edge of Town
Residential Zone
Total No of Dwellings: 45
Survey date: WEDNESDAY *18/05/22* *Survey Type: MANUAL*

55 PB-03-A-04 DETACHED HOUSES PETERBOROUGH
EASTFIELD ROAD
PETERBOROUGH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 28
Survey date: MONDAY *17/10/16* *Survey Type: MANUAL*

56 SC-03-A-07 MIXED HOUSES SURREY
FOLLY HILL
FARNHAM

Edge of Town
Residential Zone
Total No of Dwellings: 41
Survey date: WEDNESDAY *11/05/22* *Survey Type: MANUAL*

57 SC-03-A-08 MIXED HOUSES SURREY
REIGATE ROAD
HORLEY

Edge of Town
Residential Zone
Total No of Dwellings: 790
Survey date: WEDNESDAY *04/05/22* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

58 SD-03-A-01 SEMI DETACHED SWINDON
HEADLANDS GROVE
SWINDON

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 27
Survey date: THURSDAY *22/09/16* *Survey Type: MANUAL*

59 SF-03-A-05 DETACHED HOUSES SUFFOLK
VALE LANE
BURY ST EDMUNDS

Edge of Town
Residential Zone
Total No of Dwellings: 18
Survey date: WEDNESDAY *09/09/15* *Survey Type: MANUAL*

60 SF-03-A-09 MIXED HOUSES & FLATS SUFFOLK
FOXHALL ROAD
IPSWICH

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 179
Survey date: THURSDAY *24/06/21* *Survey Type: MANUAL*

61 SF-03-A-10 TERRACED & SEMI-DETACHED SUFFOLK
LOVETOFTS DRIVE
IPSWICH
WHITEHOUSE
Edge of Town
Residential Zone
Total No of Dwellings: 149
Survey date: TUESDAY *22/06/21* *Survey Type: MANUAL*

62 SM-03-A-01 DETACHED & SEMI SOMERSET
WEMBDON ROAD
BRIDGWATER
NORTHFIELD
Edge of Town
Residential Zone
Total No of Dwellings: 33
Survey date: THURSDAY *24/09/15* *Survey Type: MANUAL*

63 SP-03-A-02 MIXED HOUSES & FLATS SOUTHAMPTON
BARNFIELD WAY
NEAR SOUTHAMPTON
HEDGE END
Edge of Town
Out of Town
Total No of Dwellings: 250
Survey date: TUESDAY *12/10/21* *Survey Type: MANUAL*

64 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*

65 TB-03-A-01 TERRACED HOUSES TORBAY
BRONSHILL ROAD
TORQUAY

Suburban Area (PPS6 Out of Centre)
Residential Zone
Total No of Dwellings: 37
Survey date: WEDNESDAY *30/09/15* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

66 WB-03-A-03 MIXED HOUSES WEST BERKSHIRE
DORKING WAY
READING
CALCOT
Edge of Town
Residential Zone
Total No of Dwellings: 108
Survey date: FRIDAY *09/09/22* *Survey Type: MANUAL*

67 WK-03-A-04 DETACHED HOUSES WARWICKSHIRE
DALEHOUSE LANE
KENILWORTH

Edge of Town
Residential Zone
Total No of Dwellings: 49
Survey date: FRIDAY *27/09/19* *Survey Type: MANUAL*

68 WS-03-A-08 MIXED HOUSES WEST SUSSEX
ROUNDSTONE LANE
ANGMERING

Edge of Town
Residential Zone
Total No of Dwellings: 180
Survey date: THURSDAY *19/04/18* *Survey Type: MANUAL*

69 WS-03-A-11 MIXED HOUSES WEST SUSSEX
ELLIS ROAD
WEST HORSHAM
S BROADBRIDGE HEATH
Edge of Town
Residential Zone
Total No of Dwellings: 918
Survey date: TUESDAY *02/04/19* *Survey Type: MANUAL*

70 WS-03-A-12 MIXED HOUSES WEST SUSSEX
MADGWICK LANE
CHICHESTER
WESTHAMPNETT
Edge of Town
Village
Total No of Dwellings: 152
Survey date: WEDNESDAY *16/06/21* *Survey Type: MANUAL*

71 WS-03-A-13 MIXED HOUSES & FLATS WEST SUSSEX
LITTLEHAMPTON ROAD
WORTHING
WEST DURRINGTON
Edge of Town
Residential Zone
Total No of Dwellings: 197
Survey date: WEDNESDAY *23/06/21* *Survey Type: MANUAL*

72 WS-03-A-14 MIXED HOUSES WEST SUSSEX
TODDINGTON LANE
LITTLEHAMPTON
WICK
Edge of Town
Residential Zone
Total No of Dwellings: 117
Survey date: WEDNESDAY *20/10/21* *Survey Type: MANUAL*

LIST OF SITES relevant to selection parameters (Cont.)

73 WS-03-A-17 MIXED HOUSES & FLATS WEST SUSSEX
SHOPWHYKE ROAD
CHICHESTER

Edge of Town
Residential Zone
Total No of Dwellings: 86
Survey date: WEDNESDAY 01/03/23 Survey Type: MANUAL

74 WS-03-A-19 MIXED HOUSES & FLATS WEST SUSSEX
TURNERS HILL ROAD
EAST GRINSTEAD

Edge of Town
Residential Zone
Total No of Dwellings: 92
Survey date: MONDAY 15/05/23 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
Total People to Total Vehicles ratio (all time periods and directions): 1.69

	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	74	172	0.077	74	172	0.295	74	172	0.372
08:00 - 09:00	74	172	0.150	74	172	0.377	74	172	0.527
09:00 - 10:00	74	172	0.136	74	172	0.161	74	172	0.297
10:00 - 11:00	74	172	0.116	74	172	0.139	74	172	0.255
11:00 - 12:00	74	172	0.126	74	172	0.133	74	172	0.259
12:00 - 13:00	74	172	0.146	74	172	0.146	74	172	0.292
13:00 - 14:00	74	172	0.151	74	172	0.140	74	172	0.291
14:00 - 15:00	74	172	0.150	74	172	0.173	74	172	0.323
15:00 - 16:00	74	172	0.246	74	172	0.160	74	172	0.406
16:00 - 17:00	74	172	0.264	74	172	0.158	74	172	0.422
17:00 - 18:00	74	172	0.343	74	172	0.162	74	172	0.505
18:00 - 19:00	74	172	0.280	74	172	0.148	74	172	0.428
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.185			2.192			4.377

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.*

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Parameter summary

Trip rate parameter range selected:	8 - 1146 (units:)
Survey date date range:	01/01/15 - 04/07/23
Number of weekdays (Monday-Friday):	74
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	10
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	74	172	0.002	74	172	0.003	74	172	0.005
08:00 - 09:00	74	172	0.006	74	172	0.006	74	172	0.012
09:00 - 10:00	74	172	0.003	74	172	0.003	74	172	0.006
10:00 - 11:00	74	172	0.002	74	172	0.002	74	172	0.004
11:00 - 12:00	74	172	0.002	74	172	0.002	74	172	0.004
12:00 - 13:00	74	172	0.002	74	172	0.002	74	172	0.004
13:00 - 14:00	74	172	0.002	74	172	0.002	74	172	0.004
14:00 - 15:00	74	172	0.002	74	172	0.002	74	172	0.004
15:00 - 16:00	74	172	0.005	74	172	0.005	74	172	0.010
16:00 - 17:00	74	172	0.003	74	172	0.003	74	172	0.006
17:00 - 18:00	74	172	0.002	74	172	0.003	74	172	0.005
18:00 - 19:00	74	172	0.002	74	172	0.002	74	172	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.033			0.035			0.068

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	74	172	0.001	74	172	0.001	74	172	0.002
08:00 - 09:00	74	172	0.002	74	172	0.002	74	172	0.004
09:00 - 10:00	74	172	0.002	74	172	0.002	74	172	0.004
10:00 - 11:00	74	172	0.002	74	172	0.002	74	172	0.004
11:00 - 12:00	74	172	0.002	74	172	0.002	74	172	0.004
12:00 - 13:00	74	172	0.001	74	172	0.002	74	172	0.003
13:00 - 14:00	74	172	0.002	74	172	0.001	74	172	0.003
14:00 - 15:00	74	172	0.002	74	172	0.001	74	172	0.003
15:00 - 16:00	74	172	0.001	74	172	0.002	74	172	0.003
16:00 - 17:00	74	172	0.001	74	172	0.001	74	172	0.002
17:00 - 18:00	74	172	0.001	74	172	0.001	74	172	0.002
18:00 - 19:00	74	172	0.000	74	172	0.000	74	172	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.017			0.017			0.034

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	74	172	0.000	74	172	0.000	74	172	0.000
08:00 - 09:00	74	172	0.001	74	172	0.001	74	172	0.002
09:00 - 10:00	74	172	0.000	74	172	0.000	74	172	0.000
10:00 - 11:00	74	172	0.000	74	172	0.000	74	172	0.000
11:00 - 12:00	74	172	0.000	74	172	0.000	74	172	0.000
12:00 - 13:00	74	172	0.000	74	172	0.000	74	172	0.000
13:00 - 14:00	74	172	0.000	74	172	0.000	74	172	0.000
14:00 - 15:00	74	172	0.000	74	172	0.000	74	172	0.000
15:00 - 16:00	74	172	0.001	74	172	0.001	74	172	0.002
16:00 - 17:00	74	172	0.000	74	172	0.000	74	172	0.000
17:00 - 18:00	74	172	0.000	74	172	0.000	74	172	0.000
18:00 - 19:00	74	172	0.000	74	172	0.000	74	172	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 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	74	172	0.004	74	172	0.009	74	172	0.013
08:00 - 09:00	74	172	0.004	74	172	0.016	74	172	0.020
09:00 - 10:00	74	172	0.002	74	172	0.004	74	172	0.006
10:00 - 11:00	74	172	0.002	74	172	0.003	74	172	0.005
11:00 - 12:00	74	172	0.002	74	172	0.003	74	172	0.005
12:00 - 13:00	74	172	0.002	74	172	0.002	74	172	0.004
13:00 - 14:00	74	172	0.003	74	172	0.002	74	172	0.005
14:00 - 15:00	74	172	0.003	74	172	0.003	74	172	0.006
15:00 - 16:00	74	172	0.011	74	172	0.004	74	172	0.015
16:00 - 17:00	74	172	0.011	74	172	0.006	74	172	0.017
17:00 - 18:00	74	172	0.009	74	172	0.006	74	172	0.015
18:00 - 19:00	74	172	0.007	74	172	0.004	74	172	0.011
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.060			0.062			0.122

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	74	172	0.092	74	172	0.406	74	172	0.498
08:00 - 09:00	74	172	0.181	74	172	0.624	74	172	0.805
09:00 - 10:00	74	172	0.169	74	172	0.220	74	172	0.389
10:00 - 11:00	74	172	0.151	74	172	0.190	74	172	0.341
11:00 - 12:00	74	172	0.167	74	172	0.181	74	172	0.348
12:00 - 13:00	74	172	0.192	74	172	0.193	74	172	0.385
13:00 - 14:00	74	172	0.202	74	172	0.183	74	172	0.385
14:00 - 15:00	74	172	0.204	74	172	0.228	74	172	0.432
15:00 - 16:00	74	172	0.420	74	172	0.221	74	172	0.641
16:00 - 17:00	74	172	0.412	74	172	0.223	74	172	0.635
17:00 - 18:00	74	172	0.490	74	172	0.229	74	172	0.719
18:00 - 19:00	74	172	0.400	74	172	0.217	74	172	0.617
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.080			3.115			6.195

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	74	172	0.014	74	172	0.041	74	172	0.055
08:00 - 09:00	74	172	0.033	74	172	0.100	74	172	0.133
09:00 - 10:00	74	172	0.029	74	172	0.028	74	172	0.057
10:00 - 11:00	74	172	0.020	74	172	0.025	74	172	0.045
11:00 - 12:00	74	172	0.024	74	172	0.025	74	172	0.049
12:00 - 13:00	74	172	0.025	74	172	0.024	74	172	0.049
13:00 - 14:00	74	172	0.024	74	172	0.023	74	172	0.047
14:00 - 15:00	74	172	0.029	74	172	0.032	74	172	0.061
15:00 - 16:00	74	172	0.085	74	172	0.039	74	172	0.124
16:00 - 17:00	74	172	0.051	74	172	0.027	74	172	0.078
17:00 - 18:00	74	172	0.045	74	172	0.033	74	172	0.078
18:00 - 19:00	74	172	0.038	74	172	0.032	74	172	0.070
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.417			0.429			0.846

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	74	172	0.001	74	172	0.019	74	172	0.020
08:00 - 09:00	74	172	0.002	74	172	0.025	74	172	0.027
09:00 - 10:00	74	172	0.003	74	172	0.009	74	172	0.012
10:00 - 11:00	74	172	0.005	74	172	0.006	74	172	0.011
11:00 - 12:00	74	172	0.005	74	172	0.006	74	172	0.011
12:00 - 13:00	74	172	0.005	74	172	0.005	74	172	0.010
13:00 - 14:00	74	172	0.003	74	172	0.004	74	172	0.007
14:00 - 15:00	74	172	0.007	74	172	0.005	74	172	0.012
15:00 - 16:00	74	172	0.018	74	172	0.005	74	172	0.023
16:00 - 17:00	74	172	0.018	74	172	0.003	74	172	0.021
17:00 - 18:00	74	172	0.014	74	172	0.002	74	172	0.016
18:00 - 19:00	74	172	0.010	74	172	0.002	74	172	0.012
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.091			0.091			0.182

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	74	172	0.000	74	172	0.008	74	172	0.008
08:00 - 09:00	74	172	0.000	74	172	0.007	74	172	0.007
09:00 - 10:00	74	172	0.000	74	172	0.002	74	172	0.002
10:00 - 11:00	74	172	0.000	74	172	0.001	74	172	0.001
11:00 - 12:00	74	172	0.000	74	172	0.001	74	172	0.001
12:00 - 13:00	74	172	0.000	74	172	0.001	74	172	0.001
13:00 - 14:00	74	172	0.001	74	172	0.001	74	172	0.002
14:00 - 15:00	74	172	0.001	74	172	0.000	74	172	0.001
15:00 - 16:00	74	172	0.002	74	172	0.000	74	172	0.002
16:00 - 17:00	74	172	0.003	74	172	0.000	74	172	0.003
17:00 - 18:00	74	172	0.007	74	172	0.000	74	172	0.007
18:00 - 19:00	74	172	0.006	74	172	0.000	74	172	0.006
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.020			0.021			0.041

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	74	172	0.000	74	172	0.000	74	172	0.000
08:00 - 09:00	74	172	0.000	74	172	0.001	74	172	0.001
09:00 - 10:00	74	172	0.000	74	172	0.000	74	172	0.000
10:00 - 11:00	74	172	0.000	74	172	0.000	74	172	0.000
11:00 - 12:00	74	172	0.000	74	172	0.000	74	172	0.000
12:00 - 13:00	74	172	0.000	74	172	0.000	74	172	0.000
13:00 - 14:00	74	172	0.000	74	172	0.000	74	172	0.000
14:00 - 15:00	74	172	0.000	74	172	0.000	74	172	0.000
15:00 - 16:00	74	172	0.001	74	172	0.000	74	172	0.001
16:00 - 17:00	74	172	0.000	74	172	0.000	74	172	0.000
17:00 - 18:00	74	172	0.000	74	172	0.000	74	172	0.000
18:00 - 19:00	74	172	0.000	74	172	0.000	74	172	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.001			0.001			0.002

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	74	172	0.001	74	172	0.027	74	172	0.028
08:00 - 09:00	74	172	0.002	74	172	0.033	74	172	0.035
09:00 - 10:00	74	172	0.003	74	172	0.011	74	172	0.014
10:00 - 11:00	74	172	0.005	74	172	0.007	74	172	0.012
11:00 - 12:00	74	172	0.005	74	172	0.007	74	172	0.012
12:00 - 13:00	74	172	0.005	74	172	0.006	74	172	0.011
13:00 - 14:00	74	172	0.004	74	172	0.005	74	172	0.009
14:00 - 15:00	74	172	0.008	74	172	0.005	74	172	0.013
15:00 - 16:00	74	172	0.021	74	172	0.006	74	172	0.027
16:00 - 17:00	74	172	0.022	74	172	0.003	74	172	0.025
17:00 - 18:00	74	172	0.021	74	172	0.002	74	172	0.023
18:00 - 19:00	74	172	0.016	74	172	0.003	74	172	0.019
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.113			0.115			0.228

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
Total People to Total Vehicles ratio (all time periods and directions): 1.69

	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	74	172	0.111	74	172	0.483	74	172	0.594
08:00 - 09:00	74	172	0.220	74	172	0.772	74	172	0.992
09:00 - 10:00	74	172	0.203	74	172	0.263	74	172	0.466
10:00 - 11:00	74	172	0.177	74	172	0.224	74	172	0.401
11:00 - 12:00	74	172	0.198	74	172	0.216	74	172	0.414
12:00 - 13:00	74	172	0.225	74	172	0.225	74	172	0.450
13:00 - 14:00	74	172	0.233	74	172	0.212	74	172	0.445
14:00 - 15:00	74	172	0.244	74	172	0.268	74	172	0.512
15:00 - 16:00	74	172	0.537	74	172	0.269	74	172	0.806
16:00 - 17:00	74	172	0.495	74	172	0.259	74	172	0.754
17:00 - 18:00	74	172	0.564	74	172	0.270	74	172	0.834
18:00 - 19:00	74	172	0.461	74	172	0.256	74	172	0.717
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.668			3.717			7.385

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	74	172	0.062	74	172	0.261	74	172	0.323
08:00 - 09:00	74	172	0.127	74	172	0.342	74	172	0.469
09:00 - 10:00	74	172	0.112	74	172	0.139	74	172	0.251
10:00 - 11:00	74	172	0.093	74	172	0.116	74	172	0.209
11:00 - 12:00	74	172	0.105	74	172	0.110	74	172	0.215
12:00 - 13:00	74	172	0.125	74	172	0.122	74	172	0.247
13:00 - 14:00	74	172	0.126	74	172	0.115	74	172	0.241
14:00 - 15:00	74	172	0.130	74	172	0.151	74	172	0.281
15:00 - 16:00	74	172	0.219	74	172	0.135	74	172	0.354
16:00 - 17:00	74	172	0.235	74	172	0.137	74	172	0.372
17:00 - 18:00	74	172	0.307	74	172	0.144	74	172	0.451
18:00 - 19:00	74	172	0.258	74	172	0.135	74	172	0.393
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.899			1.907			3.806

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	74	172	0.011	74	172	0.028	74	172	0.039
08:00 - 09:00	74	172	0.015	74	172	0.024	74	172	0.039
09:00 - 10:00	74	172	0.017	74	172	0.017	74	172	0.034
10:00 - 11:00	74	172	0.017	74	172	0.018	74	172	0.035
11:00 - 12:00	74	172	0.017	74	172	0.018	74	172	0.035
12:00 - 13:00	74	172	0.017	74	172	0.019	74	172	0.036
13:00 - 14:00	74	172	0.019	74	172	0.020	74	172	0.039
14:00 - 15:00	74	172	0.015	74	172	0.016	74	172	0.031
15:00 - 16:00	74	172	0.018	74	172	0.017	74	172	0.035
16:00 - 17:00	74	172	0.023	74	172	0.015	74	172	0.038
17:00 - 18:00	74	172	0.030	74	172	0.013	74	172	0.043
18:00 - 19:00	74	172	0.018	74	172	0.009	74	172	0.027
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.217			0.214			0.431

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	74	172	0.000	74	172	0.002	74	172	0.002
08:00 - 09:00	74	172	0.000	74	172	0.003	74	172	0.003
09:00 - 10:00	74	172	0.001	74	172	0.000	74	172	0.001
10:00 - 11:00	74	172	0.001	74	172	0.001	74	172	0.002
11:00 - 12:00	74	172	0.001	74	172	0.001	74	172	0.002
12:00 - 13:00	74	172	0.001	74	172	0.001	74	172	0.002
13:00 - 14:00	74	172	0.001	74	172	0.001	74	172	0.002
14:00 - 15:00	74	172	0.001	74	172	0.001	74	172	0.002
15:00 - 16:00	74	172	0.002	74	172	0.002	74	172	0.004
16:00 - 17:00	74	172	0.002	74	172	0.001	74	172	0.003
17:00 - 18:00	74	172	0.003	74	172	0.001	74	172	0.004
18:00 - 19:00	74	172	0.002	74	172	0.001	74	172	0.003
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.015			0.015			0.030

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.*

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APPENDIX B. CONTRIBUTIONS TABLE

Works	Drawing Reference
S278 /S38 Access Works	
Northern Site	
Proposed extention of Wychwood Place*	ITB9155-GA-048
Proposed amendments to Wychwood Place	ITB9155-GA-064
Southern Site	
Proposed southern access priority junction	ITB9155-GA-069A
Proposed Central access prioritiy junction	ITB9155-GA-038I
S278 Transport Infrastructure Improvements	
Transport Infrastrucutre Improvements	
Northern Site	
Northwards extension of footways on Wychwood Place as far as shared surface leading to pedestrian / cycle access	ITB9155-GA-103
New facilities, including shelters (cantilever for the southbound bus stop), raised kerbs and RTPI information at bus stops north of the village.	ITB9155-GA-103
Southern Site	
Widening of Footway to Provide Shared Use and / or Footway	ITB9155-GA-101
Tactile paving and / or dropped kerbs at all side roads of Vicarage Road (Glebelands, Sunny Avenue, Squires Close, Buckley Place and Sunnyhill Close).	ITB9155-GA-102
Dropped kerb / tactile paving crossing on Vicarage Road and Grange Road	ITB9155-GA-102
Widening of the footway on the eastern side of Turners Hill Road south of Grange Road using the overgrown highway verge to the east	ITB9155-GA-102
Proposed improved footways and crossing connections to bus stops on Turners Hil Road south of village	ITB9155-GA-102
Bus shelter, raised kerbs, RTPI and seating (cantilever for southbound bus stop) south of the village.	ITB9155-GA-102

Section 106 Contributions

Works	Cost	Comments
Northern site		
Car club	£21,600.00	Total cost = £36,000 plus VAT (£43,200). One car per site and cost split 50/50
Bus contribution	£62,500.00	£25k per aunnum. 2.5 years each
Travel Plan monitoring fees- northern site	£3,650.00	TBC
Southern Site		
Car club	£21,600.00	
Bus contribution (25kpa for 2.5 years	£62,500.00	
Travel Plan monitoring fees- southern site	£3,650.00	
Surfacing of Worth Way	£150,000.00	
Total		
Northern site	£87,750.00	
Southern Site	£237,750.00	
Total	£325,500.00	