APPENDIX A

To: **Head of Planning**
Wealden District Council
Council Offices
Vicarage Lane
Hailsham
FAO: **Matt Taylor**

East Sussex County Council

APPLICATION NUMBER	**HW/WD/18/0509/MAJ**

Applicant: Chailey Homes Ltd

Location: LAND ADJACENT TO OLD ORCHARD HOUSE, HOREBEECH LANE, HORAM.

Development: ERECTION OF 58 DWELLINGS, ASSOCIATED GARAGES AND INFRASTRUCTURE.

Road Name or Number	C208	**Consultation Date**	23 July 2018	**Use Class**	
National Grid Reference	558363 116889	**Contact Officer**	Kal Kamboh 01273 482287		

Recommendation:

No objection		**Objection**	x
No objection subject to the imposition of conditions		**Objection due to insufficient information**	x

Executive Summary
This application cannot be supported by this authority as submitted. There are details that are absent, require amendment or further verification:

1. Visibility sightlines at the access
2. Details of Cuckoo Trail connection
3. Junction modelling A267/Horebeech Lane mini-roundabout
4. Trip rate verification
5. Travel Plan statement
6. amend shared-space areas
7. car parking details
8. off-site highway works

Report
This application seeks full consent for 58 dwellings, assumed to be private ownership, though the layout plan suggests 21 social units (~35%). Being a full application, the submission seeks approval for the access, layout, scale, design and landscaping. The applicant has not engaged in any pre-application discussions with the highway authority.

The main issues relating to this application are:

- Site and location
- Site access/Accessibility for non-car users
- Impact of development traffic on the highway network
- Layout and landscaping in relationship to parking, servicing and loading/unloading

Site and Location
The site is agricultural land south east of the village and has direct access onto Horebeech Lane, east of the Cuckoo Trail link. Horebeech Lane is currently subject to 30 mph speed limit from the A267 junction up to a point approximately 190m east of the Cuckoo Trail, where speeds become derestricted. The application site is currently agricultural, and there are a small number of detached dwellings in its vicinity. The character and appearance of this local area is rural; the road has good forward visibility and carriageway width 5.5-5.8m. Vehicle speeds are as a result of this alignment between the bridge and the site recorded as reaching up to 80 mph. The 85th percentile over the course of 7 days is 55 mph WB and 54 mph EB.

The village centre is approx. 900 m from the site via the Cuckoo trail or 1km using Horebeech Lane. The village provides a selection of local shops, café, a post office and hairdressers, and can be reached easily on foot or cycle from the site. Primary and secondary school are further afield, with the most local primary school at around 2km distance.

Site access
The site frontage is partly within a 30mph limit, and thereafter Horebeech Lane has speeds that are derestricted towards the east. As part of the previously consented development at Rosemead Farm, a highway scheme was sought to extend the 30 mph speed limit, enable the mini-roundabout to be installed to serve that site and suitable speed reducing measures, a gateway feature, in addition to signage would need to be in place to ensure appropriate vehicle speeds can be self enforced. The highway scheme for Rosemead Farm development of 123 houses is yet to be finalised, including the extent of the proposed 30 mph speed limit extension.

In considering this application, off-site highway works in order to compliment the emerging road proposals, or in the event Rosemead Farm development is not delivered an appropriate scheme commensurate to the scale of development shall be sought. It is recommended that the proposed development itself should have visual frontage to maintain continuity from the existing village edge on west side of bridge to the cluster of detached houses at Laundry Lane junction to assist self-enforcement of a 30 mph speed limit. A change to the speed limit would need to be authorised by a Traffic Regulation Order and have support from Sussex Police, the enforcing body.

Main access - The proposal for a priority junction as type of access is acceptable in principle for the scale of the development, but given the proposed network layout it may not be appropriate for the first entry point for residential development in the village on the approach from the east. The actual recorded vehicle speeds on Horebeech Lane have been taken into account when determining the driver sightline requirement at the access. The drawing 3278:01rev G indicates the sightlines but does not mark them out in full. From a desktop measurement to the east, the sightline is likely to be obstructed by neighbouring boundary vegetation; and to the west can be cleared of overhanging vegetation along the site frontage. This should be clarified and shown in full on a plan. An access to a development of this scale on a road that is subject to the exhibited vehicle speeds cannot be supported without speed reducing measures. Therefore, although it is claimed by the applicant that further highway works are not required to accommodate this development, my view is that a change in the local character and introduction of resident activity would certainly require a conducive highway environment to support sustainable modes of travel.

Noted is that a RSA1 has been carried out for site access with both a preliminary highway scheme associated with Rosemead Farm development and without. As the highway scheme is yet to be finalised, it is likely that a further RSA1 will be required. Given that there will be the introduction of residential related activity; it is recommended that vehicle speeds are effectively reduced to 30 mph to accommodate pedestrian activity at the site entrance, particularly

crossing the road to reach the footway to access the Cuckoo Trail or village centre. It is recommended that the 30mph speed limit extends to an agreed position to accommodate a further extension of the village.

Highway scheme – a scheme to accommodate this site is required and at this early stage consideration should be given to extending the 30 mph east of Laundry Lane and a mini-roundabout provided at the junction Horebeech Lane/Laundry Lane to define the start of the village, on the basis that the Rosemead Farm site access would no longer be the first point of entering the village extension. This would also require supplemental traffic calming features to compliment the Rosemead Farm highway scheme when finalised. It is recommended that the applicant enters into discussions with this authority so that 'access' can be discussed and appropriate measures can be secured for this site.

Footway – as part of the proposal, footway enhancement is being proposed along the site frontage, west side of access to linking into the site and to the opposite side of Horebeech Lane where there is an existing footway connecting to the Cuckoo Trail and westwards along Horebeech Lane towards the A267. An upgrade to the footway on the north side of Horebeech Lane is required for connectivity and travel choice and should connect to the works proposed as part of the Rosemead development access. The footway between the proposed crossing point outside the site access and the proposed mini-roundabout should be 2m in width which can be achieved by extending the hard surfacing closest to the carriageway.

Within the site layout, a footpath link is shown in a southern direction towards the Cuckoo Trail. The route is through a private car park area which suggests that residents or Trail users would have to pass across private land. Will this be a publicly available route or with the link to the Cuckoo Trail be exclusively for residents of this development and be gated? The connecting path should be at a standard suitable for cycles, or minimum 2.75m wide. The details of the linkage between site and Cuckoo Trail should be provided. In principle this connection is supported.

Highway Impact
This is considered by undertaking assessment of the safety and capacity of Horebeech Lane and directly affected junctions on popular routes/desire lines from the site.

I have checked Sussex Police injury crash records over the last 5 years and there have been no recorded injury crashes on Horebeech Lane within 500m of the site access. The closest crash took place in April 2016 at the then priority junction Horebeech Lane/A267, which was driver error. The road and features were not contributory factors to this crash. There is no evidence therefore to suggest that the road dos not operate safely.

A development of 58 dwellings has been used for trip assessment based on privately owned housing. The emerging trip rate for vehicles within the Transport statement is 4.09 which is much lower than the rate used for Rosemead Farm (5.5). After checking the sites used by the applicant from the TRICS database, from the 13 sites, 6 have a rail station and 7 are edge of town locations. As such I am of the view that this rate is too low and not appropriate in this case for consideration on the wider network and future forecast/growth.

It is expected that from the site, turning ratios would result in the majority of vehicle trips to connect to the A267 and B2033 (~95%). No junction assessments have been provided within the Transport Statement. On the basis that previous junction modelling as part of Rosemead Farm assessment looked at the junction A267/Horebeech Lane as a priority junction and mini-roundabout (at the time the mini-roundabout had not been installed), the model run for ARCADY deduced:
"this junction would operate with additional queuing without the proposed development (Rosemead Farm) in 2021 (around 9 vehicles) and does not reach capacity. With the

development proposed, the queues increase in length to 13-14 vehicles and although the roundabout does not reach full capacity it reaches a level that could raise operational concerns."

The mini-roundabout has now been installed (October 2017) and it is recommended that this is modelled with and without the proposed development and including committed developments approved in the last 3 years and forecast using Tempro 7.2 to end of local plan period.
To be included in the localised junction model are the following approved developments:

WD/17/2952 – 58 dwellings
WD/16/2071 – 123 dwellings
WD/17/0022 – 20 dwellings
WD/16/2533 – crematorium
WD/16/1560 – 21 dwellings

Parking/Servicing
The proposed development is laid out as shown in dwg 3278:01revG and has two points of access; a vehicular access onto Horebeech Lane and a footpath link to the Cuckoo Trail south of the site. For consideration from a highway perspective is whether the parking and servicing needs of the quantum of housing proposed can be delivered as part of the proposed layout. In particular, parking should be sufficient so that there is no risk of overspill onto the proposed estate roads or onto Horebeech Lane. The schedule of parking is provided within the TS as 139 spaces. It is important that these are a minimum of 2.4m x 4.8m and should be noted that garages only count for 0.3 of a space, on the basis that they are not commonly used for parking. It is recommended that a parking accommodation schedule is provided to assess the number of open spaces that are available. It is recommended that for units with 2 bedrooms and less 1 space is allocated and larger units have 2 spaces allocated, these being open spaces. This allows for the parking demand calculator to work out the number of unallocated spaces that should be made available for both residents and visitors.

In terms of the parking layout shown, I have a number of concerns regarding:
1) south of plots 38-41 – there is insufficient turning provision for the 2 end spaces, leaving drivers having to reverse into or out of the whole courtyard area if spaces are occupied. There is little forward visibility for more than one vehicle needing access.
2) north of plots 42-45 – this indicates an awkward entry angle and likely to cut across the frontage of the landscaped area. Parking positions would require onerous turning manoeuvres to access spaces, particularly for those adjacent to plot 46.
3) Open spaces fronting plots 31/32 – there appears to be insufficient distance to manoeuvre into these spaces.
4) courtyard between plot 24 and 25 – spaces are difficult to access, and turning area being irregular, creates a difficult area for parking which may result in parking on spine road.
5) south of plot 10 – the 2 end spaces have no turning area and would have to reverse back to turning head.
6) courtyard for plots 17,18,19,20 – arrangement is tight and could be perpendicular instead.
7) spaces between plots 35/36; at plots 55, 29 or any open spaces flanked by a hard boundary feature or building elevation– these should be a minimum width of 2.75, or 3m preferably

Swept path analysis should be provided for a 12m long service vehicle to future proof the site, the vehicle type is:
Vulture 3025(N) Scania P94GB 8x4 NB300 Chassis
Overall length: 11.997m

Bin/recycling stores should be conveniently accessible for deposit by residents and collection by the refuse collection services. Refuse collection points are not shown on the layout drawing, especially where dwellings are positioned distanced from the spine road or areas where there is

a suitable turning head (i.e plots 1,2,58,38-42,32,33). Please provide a waste collection strategy and refer to guidance from WDC waste team.

Parking and storage for cycles should be safe and convenient. Where there is no garage a shed or communal secure store should be provided.

I note that the applicant proposes shared use of internal roads i.e. with no separation of road space between pedestrians and vehicles. ESCC has generally been supportive of such layouts where appropriate, but notes that DfT has temporarily suspended LTN 1/11 and published a strategy document on the suitability of shared space in relation to its use by mobility impaired users "The Inclusive Transport Strategy" July 2018

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/728547/inclusive-transport-strategy.pdf

DfT is recommending that shared spaces are not taken forward at this time until the Department has completed a thorough review of such layouts/schemes. I recommend therefore that the applicant considers the site layout in light of this report and justifies their approach and amend plans as necessary.

Travel Plan
A travel plan statement is required for development that is between 50 and 80 housing units. The applicant should refer to the guidance on the ESCC website:
https://eastsussexgovuk.blob.core.windows.net/media/1764/travel_plan_guidance.pdf

There should be incentives to use alternative modes of travel other than the private car through a residents' information pack, cycle vouchers, bus taster tickets, shopping delivery vouchers through a selected retailer, and biannual visits from a bike doctor, for example. This can be secured through an appropriate legal agreement and surveys will be expected to be submitted at baseline stage (min occupancy of 40 units) and year 1, 3 and 5.

Summary
As submitted, this application cannot be fully supported in highway terms as set out within the report and the following aspects of the proposal will need to be provided for reconsideration.

1. Visibility sightlines at the access and appropriateness of the access
2. Details of Cuckoo Trail connection
3. Junction modelling A267/Horebeech Lane mini-roundabout
4. Trips rate verification
5. Travel Plan statement
6. amend shared-space areas
7. car parking details/layout revision
8. highway scheme options

All of the above constitute details which have not been satisfactorily provided for this detailed planning application. Further information should be provided in order to overcome the 8 points.

Signed: Kal Kamboh by email Date: 15/08/18

For Director of Communities, Economy and Transport
On behalf of the Highway Authority

HT401

APPENDIX B



Accommodation Schedule

HT Code/ Sq.m.	Accommodation	QTY	Total Sq.m.	Social units
50 S (gf)	1 Bedroom 2 person apartment	4	200	4
50 S (ff)	1 Bedroom 2 person apartment	4	236	4
79	2 Bedroom 4 person house	6	474	
79 S	2 Bedroom 4 person house	8	632	8
84	3 Bedroom 5 person house	2	168	
93	3 Bedroom 5 person house	9	837	
93 S	3 Bedroom 5 person house	5	465	5
95	3 Bedroom 5 person house	9	855	
96	3 Bedroom 5 person house	5	480	
132	4 Bedroom 7 person house	4	524	
131	4 Bedroom 8 person house	2	268	
		58	5139	21

Note:- Social units are indicated with * on site layout

KEY

- DCP Refuse bin collection point
- RSA Refuse bin storage area
- b Refuse bin storage location
- s Shed for bicycle storage
- c Bicycle shelter/store

revision	
p : amended	30/08/18
o : schedule amended	20/04/18
n : schedule amended	13/04/18
m : red line amended	06/04/18

client: Chailey Homes

project: Horebeech Lane, Horam, East Sussex

title: Site Layout 1:500 @ A2

john finch partnership
chartered architects & town planning consultants
88 broomfield road
chelmsford cm1 1ss
01245 354319/250780
admin@johnfinchpartnership.co.uk
www.johnfinchpartnership.co.uk

date	06/09/17	scale	1:500
drawn	DCC	checked	RH
dwg no	3278:01	revision	p

APPENDIX C

A R C A D Y 6

ASSESSMENT OF ROUNDABOUT CAPACITY AND DELAY

Analysis Program: Release 7.0 (FEBRUARY 2010)

(c) Copyright TRL Limited, 2010

Adapted from ARCADY/3 which is Crown Copyright
by permission of the controller of HMSO

For sales and distribution information,
program advice and maintenance, contact:

TRL Limited Tel: +44 (0) 1344 770758
Crowthorne House Fax: +44 (0) 1344 770356
Nine Mile Ride Email: software@trl.co.uk
Wokingham, Berks. Web: www.trlsoftware.co.uk
RG40 3GA,UK

THE USER OF THIS COMPUTER PROGRAM FOR THE SOLUTION OF AN ENGINEERING PROBLEM IS
IN NO WAY RELIEVED OF THEIR RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

Run with file:-
"C:\Program Files (x86)\ARCADY 6\6004A HORAM\A267 - Horebeech Lane mini 2021+DEV PM.vai"
(drive-on-the-left) at 15:23:17 on Tuesday, 21 June 2016

FILE PROPERTIES

RUN TITLE: A267 / Horebeech Lane mini 2021+DEV PM
LOCATION:
DATE: 21/06/16
CLIENT:
ENUMERATOR: rnew [GTASIMONDENT]
JOB NUMBER: 6004A
STATUS:
DESCRIPTION: A267 / Horebeech Lane mini 2021+DEV PM

INPUT DATA

ARM A - A267 north
ARM B - Horebeech Lane
ARM C - A267 south

MINI-ROUNDABOUT GEOMETRIC DATA

JUNCTION IN LONDON
LIGHTING CONDITIONS : NORMAL
ROAD SURFACE CONDITION: NORMAL

T5

ARM	V (M)	E (M)	Lm(M)	Vm(M)	A (M)	K (M)	G (%)	SLOPE	INTERCEPT (PCU/MIN)
ARM A	3.05	3.50	5.50	3.05	8.00	6.00	5.00	0.775	18.530
ARM B	2.81	3.50	5.50	2.42	7.20	5.00	0.00	0.508	13.741
ARM C	3.05	3.50	5.50	3.05	8.00	6.00	-2.50	0.650	16.409

V = approach half-width Lm = effective flare length A = distance between arms
E = entry width Vm = minimum approach half-width K= entry corner kerb line G=gradient over 50 m

TRAFFIC DEMAND DATA

Only sets included in the current run are shown

SCALING FACTORS

T13

ARM	FLOW SCALE(%)
A	100
B	100
C	100

TIME PERIOD BEGINS(16.30)AND ENDS(17.30)

LENGTH OF TIME PERIOD -(60) MINUTES

LENGTH OF TIME SEGMENT - (15) MINUTES

DEMAND FLOW PROFILES ARE INPUT DIRECTLY.

DEMAND SET TITLE: A267 / Horebeech Lane mini 2021+DEV PM

DEMAND SET TITLE: A267 / Horebeech Lane mini 2021+DEV PM

T33

TIME	FROM/T	ARM A	ARM B	ARM C
16.30 - 17.30				
	ARM A	0.000	0.190	0.810
		0.0	187.0	797.0
		(0.0)	(1.6)	(2.5)
	ARM B	0.727	0.000	0.273
		88.0	0.0	33.0
		(1.1)	(0.0)	(1.6)
	ARM C	0.901	0.099	0.000
		528.0	58.0	0.0
		(2.7)	(1.7)	(0.0)

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

T70

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)		AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
ARM A	16.40	17.37	0.944	- - -	0.0	9.7	106.9	-	0.500
ARM B	2.02	7.01	0.288	- - -	0.0	0.4	5.6	-	0.198
ARM C	9.77	15.06	0.649	- - -	0.0	1.8	24.6	-	0.181
16.45-17.00									
ARM A	16.40	17.36	0.945	- - -	9.7	11.8	163.2	-	0.767
ARM B	2.02	6.79	0.297	- - -	0.4	0.4	6.2	-	0.209
ARM C	9.77	15.05	0.649	- - -	1.8	1.8	27.0	-	0.189
17.00-17.15									
ARM A	16.40	17.36	0.945	- - -	11.8	12.9	185.6	-	0.839
ARM B	2.02	6.77	0.299	- - -	0.4	0.4	6.3	-	0.211
ARM C	9.77	15.05	0.649	- - -	1.8	1.8	27.3	-	0.189

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)		AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
ARM A	16.40	17.36	0.945	- - -	12.9	13.6	198.8	-	0.879
ARM B	2.02	6.75	0.299	- - -	0.4	0.4	6.3	-	0.211
ARM C	9.77	15.05	0.649	- - -	1.8	1.8	27.5	-	0.189

QUEUE AT ARM A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.45	9.7	**********
17.00	11.8	************
17.15	12.9	*************
17.30	13.6	**************

QUEUE AT ARM B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.4
17.00	0.4
17.15	0.4
17.30	0.4

QUEUE AT ARM C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE	
16.45	1.8	**
17.00	1.8	**
17.15	1.8	**
17.30	1.8	**

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

T75

ARM	TOTAL DEMAND		* QUEUEING * DELAY *		* INCLUSIVE QUEUEING * DELAY *	
	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)
A	984.0	984.0	654.5	0.67	659.8	0.67
B	121.2	121.2	24.4	0.20	24.5	0.20
C	586.2	586.2	106.5	0.18	106.6	0.18
ALL	1691.4	1691.4	785.4	0.46	790.9	0.47

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD.
* INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD.
* THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

END OF JOB

========== end of file ==========

Printed at 15:23:56 on 21/06/2016]

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

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

Filename: A267 - Horebeech Lane Mini Roundabout Assessment.arc8
Path: P:\RGP\2017 Projects (3493-3600)\3547 Horebeech Lane, Horam, East Sussex\Technical Assessments\Junction Modelling
Report generation date: 31/08/2018 14:41:04

« Mini Roundabout Junction Assessment - 2021 + Committed Development + Rosemead Farm Development, PM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	Mini Roundabout Junction Assessment - 2021 + Committed Development + Rosemead Farm Development			
Arm 1	29.25	94.85	1.02	F
Arm 2	0.55	15.10	0.36	C
Arm 3	2.48	14.18	0.72	B

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

"D1 - 2028 + Committed Development, AM" model duration: 08:00 - 09:30
"D2 - 2028 + Committed Development, PM" model duration: 17:00 - 18:30
"D3 - 2028 + Committed Development + Development, AM" model duration: 08:00 - 09:30
"D4 - 2028 + Committed Development + Development, PM" model duration: 17:00 - 18:30
"D5 - 2021 + Committed Development + Rosemead Farm Development, PM " model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 31/08/2018 14:41:02

File summary

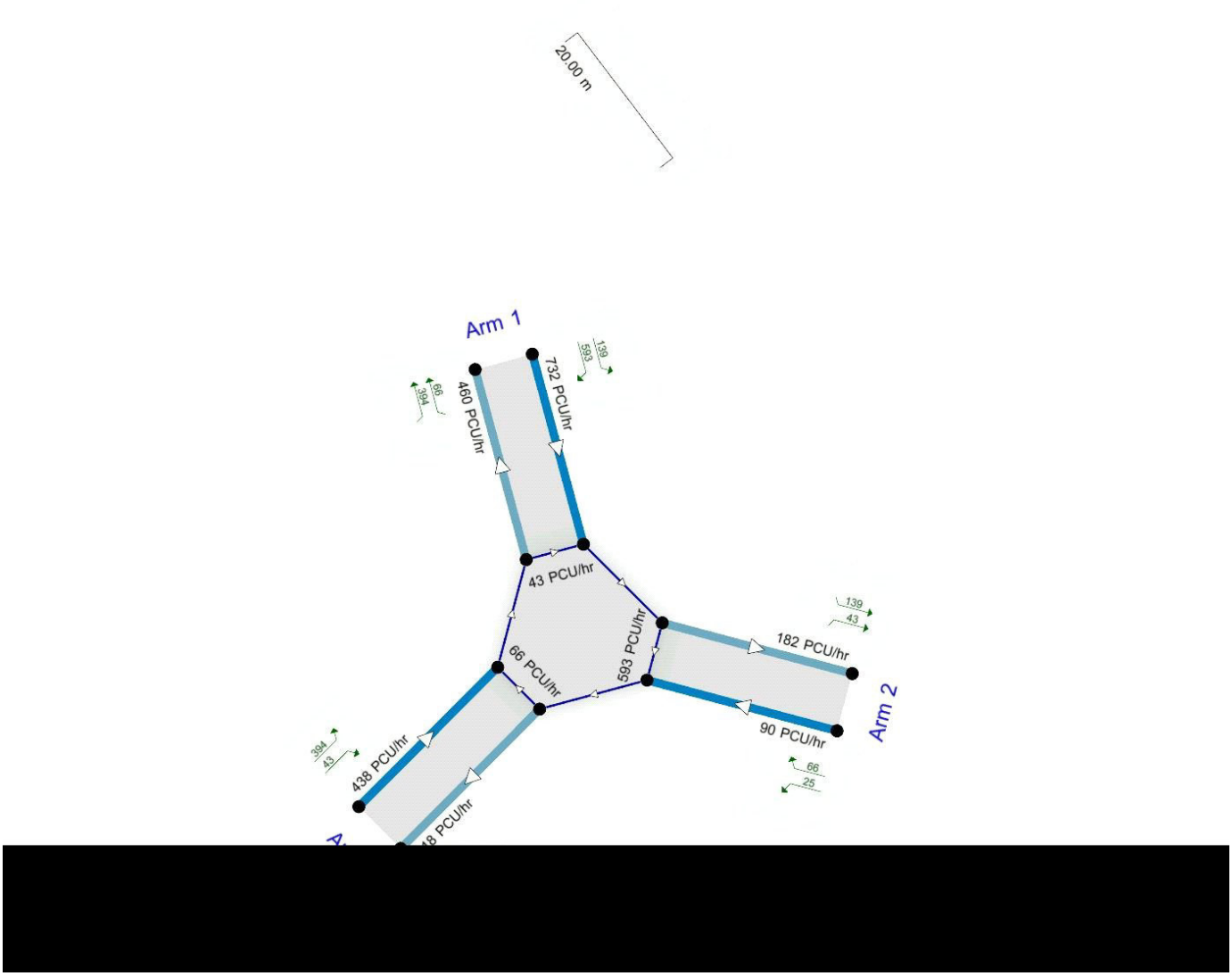
Title	A267 / Horebeech Lane Mini Roundabout
Location	
Site Number	
Date	29/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of ARCADY.

Mini Roundabout Junction Assessment - 2021 + Committed Development + Rosemead Farm Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Mini Roundabout Junction Assessment	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2021 + Committed Development + Rosemead Farm Development, PM	2021 + Committed Development + Rosemead Farm Development	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	61.19	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	A267 (N)	
2	2	Horebeech Lane	
3	3	A267 (S)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.05	3.05	3.50	5.50	9.00	6.00	5.00	
2	2.81	2.42	3.50	5.50	7.20	5.00	0.00	
3	3.05	3.05	3.50	5.50	9.00	6.00	-2.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.775	1111.819
2		(calculated)	(calculated)	0.508	803.148
3		(calculated)	(calculated)	0.650	963.229

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	984.00	100.000
2	ONE HOUR	✓	121.00	100.000
3	ONE HOUR	✓	586.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	187.000	797.000
	2	88.000	0.000	33.000
	3	528.000	58.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.19	0.81
	2	0.73	0.00	0.27
	3	0.90	0.10	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.002	1.008
	2	1.007	1.000	1.003
	3	1.009	1.001	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	0.2	0.8
	2	0.7	0.0	0.3
	3	0.9	0.1	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.02	94.85	29.25	F
2	0.36	15.10	0.55	C
3	0.72	14.18	2.48	B

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	740.81	732.28	43.30	0.00	1078.24	0.687	2.13	10.242	B
2	91.10	90.21	593.12	0.00	501.56	0.182	0.22	8.786	A
3	441.17	437.52	65.61	0.00	920.58	0.479	0.91	7.460	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	884.60	875.91	51.97	0.00	1071.52	0.826	4.30	17.758	C
2	108.78	108.37	709.46	0.00	442.40	0.246	0.32	10.828	B
3	526.80	525.07	78.81	0.00	911.99	0.578	1.35	9.337	A

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1083.40	1022.26	63.43	0.00	1062.64	1.020	19.59	54.795	F
2	133.22	132.41	827.99	0.00	382.13	0.349	0.53	14.454	B
3	645.20	640.90	96.30	0.00	900.62	0.716	2.42	13.745	B

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1083.40	1044.76	63.84	0.00	1062.32	1.020	29.25	94.849	F
2	133.22	133.13	846.22	0.00	372.86	0.357	0.55	15.096	C
3	645.20	644.95	96.82	0.00	900.28	0.717	2.48	14.177	B

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	884.60	979.02	52.56	0.00	1071.06	0.826	5.64	52.408	F
2	108.78	109.44	792.97	0.00	399.94	0.272	0.38	12.494	B
3	526.80	531.08	79.59	0.00	911.48	0.578	1.41	9.646	A

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	740.81	754.19	43.85	0.00	1077.82	0.687	2.30	11.629	B
2	91.10	91.70	610.86	0.00	492.54	0.185	0.23	9.049	A
3	441.17	443.05	66.69	0.00	919.87	0.480	0.94	7.643	A

APPENDIX D

WF01BEW - Location of usual residence and place of work (OA level)

ONS Crown Copyright Reserved [from Nomis on 20 April 2017]

population: All usual residents ages 16 and over in employment the week before the census
units: Persons
date: 2011

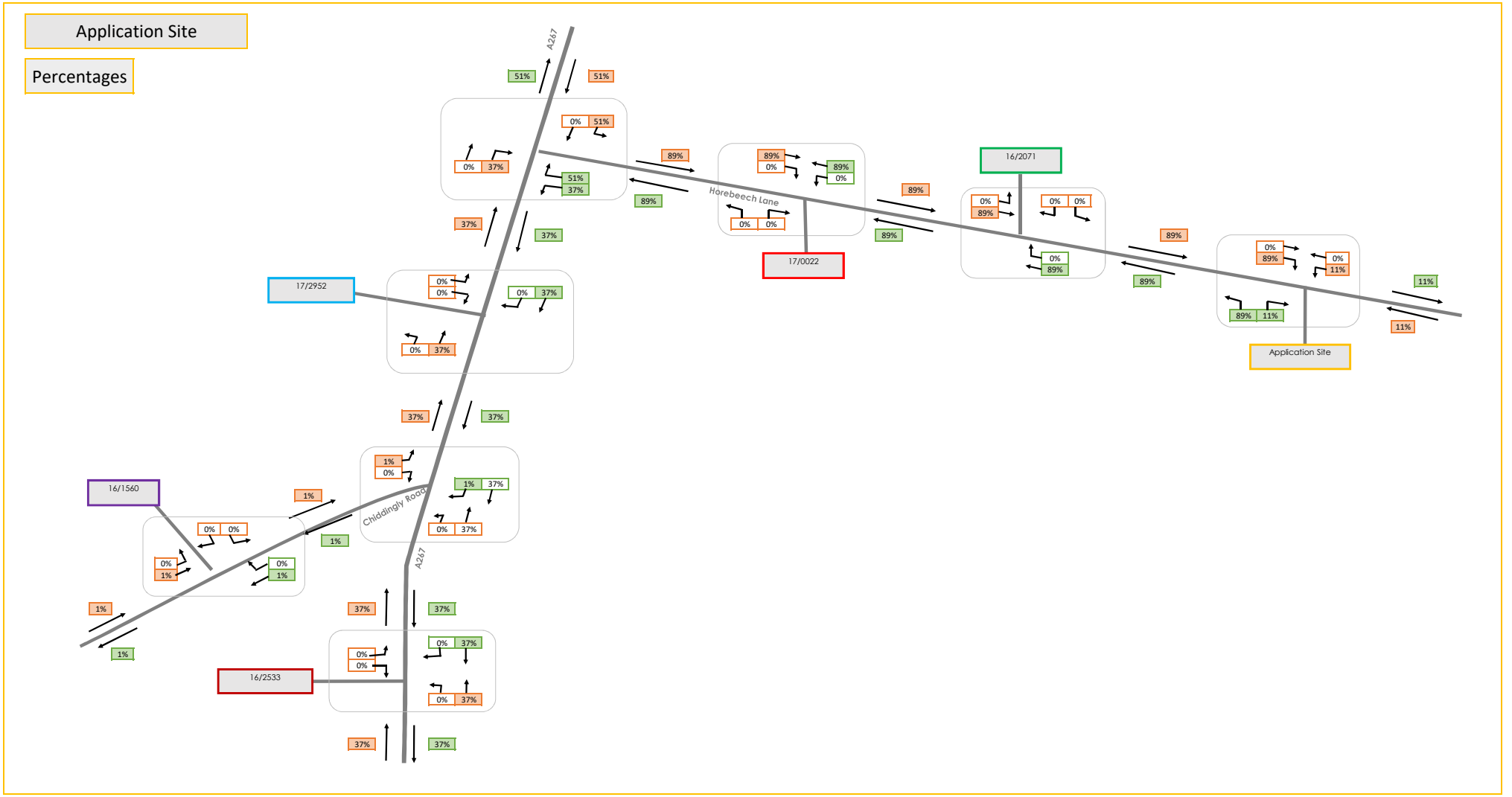
place of work / **currently residing in**

Mid Layer	E01021200 : Wealden 011D	E01021201 : Wealden 011E	Combined		B2203	Chiddingly Rd	A267 (S)	Laundry Ln	Marle Green	A267	A26 (N)	A22 (N)	B2102	A272
Lower Layer														
E01021150 : Wealden 010A	9	5	14	1.8%							1			
E01021191 : Wealden 010B	27	32	59	7.4%		0.5					0.5			
E01021192 : Wealden 010C	0	5	5	0.6%		1								
E01021193 : Wealden 010D	13	10	23	2.9%		0.75					0.25			
E01021194 : Wealden 010E	3	2	5	0.6%		1								
E01021149 : Wealden 011A	7	4	11	1.4%							1			
E01021189 : Wealden 011B	13	14	27	3.4%		0.25			0.75					
E01021190 : Wealden 011C	3	7	10	1.3%		0.5			0.5					
E01021200 : Wealden 011D	15	9	24	3.0%										
E01021201 : Wealden 011E	30	35	65	8.2%										
Mid Layer														
E02004413 : Wealden 011	68	69	137	17.2%										
E02004412 : Wealden 010	52	54	106	13.3%										
E02004411 : Wealden 009	19	13	32	4.0%									1	
E02004417 : Wealden 015	14	14	28	3.5%				0.75		0.25				
E02004410 : Wealden 008	17	9	26	3.3%							1			
E02004420 : Wealden 018	12	13	25	3.1%				1						
E02004415 : Wealden 013	17	4	21	2.6%				1						
E02004416 : Wealden 014	6	12	18	2.3%						1				
E02004418 : Wealden 016	7	6	13	1.6%				1						
E02004414 : Wealden 012	5	6	11	1.4%									1	
E02004406 : Wealden 004	6	4	10	1.3%							1			
E02004407 : Wealden 005	3	7	10	1.3%		0.5					0.5			
E02004408 : Wealden 006	2	7	9	1.1%							1			
E02004404 : Wealden 002	3	5	8	1.0%							1			
E02004405 : Wealden 003	4	4	8	1.0%							1			
E02004419 : Wealden 017	3	4	7	0.9%				0.75		0.25				
E02004421 : Wealden 019	2	4	6	0.8%				1						
E02004403 : Wealden 001	1	4	5	0.6%								1		
E02004409 : Wealden 007	1	4	5	0.6%								1		
E02004422 : Wealden 020	0	2	2	0.3%				1						
E02004423 : Wealden 021	0	0	0	0.0%				1						
merged local authority														
Wealden	242	245	487	61.1%										
Eastbourne	29	42	71	8.9%				1						
Lewes	22	29	51	6.4%				1						
Tunbridge Wells	13	24	37	4.6%							1			
Rother	13	19	32	4.0%				0.25		0.75				
Westminster,City of London	10	21	31	3.9%				1						
Crawley	9	17	26	3.3%				0.5				0.5		
Brighton and Hove	8	13	21	2.6%				1						
Mid Sussex	7	11	18	2.3%										1
Hastings	5	9	14	1.8%						1				
Tonbridge and Malling	3	8	11	1.4%		0.25					0.75			
Southwark	6	2	8	1.0%							1			
Hillingdon	3	2	5	0.6%							1			
Tandridge	2	3	5	0.6%									1	
Horsham	1	4	5	0.6%			0.5							0.5
Bromley	0	4	4	0.5%							1			
Croydon	2	2	4	0.5%								1		
Islington	1	3	4	0.5%							1			
Merton	1	3	4	0.5%									1	
Tower Hamlets	2	2	4	0.5%							1			
Elmbridge	0	4	4	0.5%							1			
Reigate and Banstead	1	3	4	0.5%							0.5		0.5	
Lambeth	1	2	3	0.4%							1			
Worthing	2	1	3	0.4%				1						
Enfield	1	1	2	0.3%							1			
Wandsworth	2	0	2	0.3%							0.5		0.5	
Sevenoaks	1	1	2	0.3%							1			
Bristol, City of	1	1	2	0.3%				0.5			0.5			
Warrington	1	0	1	0.1%							1			
Manchester	0	1	1	0.1%							1			
Coventry	0	1	1	0.1%							1			
Watford	0	1	1	0.1%							1			
Babergh	0	1	1	0.1%							1			
Camden	0	1	1	0.1%							1			
Havering	0	1	1	0.1%							1			
Hounslow	0	1	1	0.1%							1			
Kensington and Chelsea	1	0	1	0.1%							1			
Lewisham	0	1	1	0.1%							1			
Newham	1	0	1	0.1%							1			
Sutton	1	0	1	0.1%									1	
Medway	0	1	1	0.1%					0.25		0.75			
Bracknell Forest	0	1	1	0.1%							1			
Dartford	0	1	1	0.1%							1			
Maidstone	0	1	1	0.1%							1			
Shepway	0	1	1	0.1%						1				
Guildford	0	1	1	0.1%							1			
Waverley	1	0	1	0.1%							1			
Adur	0	1	1	0.1%			0.5	0.5						
Chichester	1	0	1	0.1%			1							
East Dorset	1	0	1	0.1%			1							
		Total	797	100.0%										

B2203	Chiddingly Rd	A267 (S)	Laundry Ln	Marle Green	A267	A26 (N)	A22 (N)	B2102	A272	
						1.8%				
3.7%						3.7%				
0.6%										
2.2%						0.7%				
0.6%										
						1.4%				
0.8%				2.5%						
0.6%				0.6%						
										4.0%
			2.6%		0.9%					
						3.3%				
			3.1%							
			2.6%							
					2.3%					
			1.6%							
										1.4%
						1.3%				
0.6%						0.6%				
						1.1%				
						1.0%				
						1.0%				
			0.7%		0.2%					
			0.8%							
								0.6%		
								0.6%		
			0.3%							
			8.9%							
			6.4%							
						4.6%				
			1.0%		3.0%					
			3.9%							
			1.6%				1.6%			
			2.6%							
					1.8%					2.3%
0.3%						1.0%				
						1.0%				
						0.6%				
								0.6%		
	0.3%									0.3%
						0.5%				
							0.5%			
						0.5%				
								0.5%		
						0.5%				
						0.3%		0.3%		
			0.4%			0.4%				
						0.3%				
						0.1%		0.1%		
						0.3%				
			0.1%			0.1%				
						0.1%				
						0.1%				
						0.1%				
						0.1%				
						0.1%				
						0.1%				
						0.1%				
						0.1%				
						0.1%				
						0.1%				
						0.1%				
						0.1%				
						0.1%				
				0.0%		0.1%				
						0.1%				
						0.1%				
						0.1%				
					0.1%					
						0.1%				
						0.1%				
	0.1%		0.1%							
	0.1%									
	0.1%									
9.6%	0.6%	36.7%	3.2%	8.2%	28.6%	2.1%	2.9%	5.4%	2.6%	0.0%

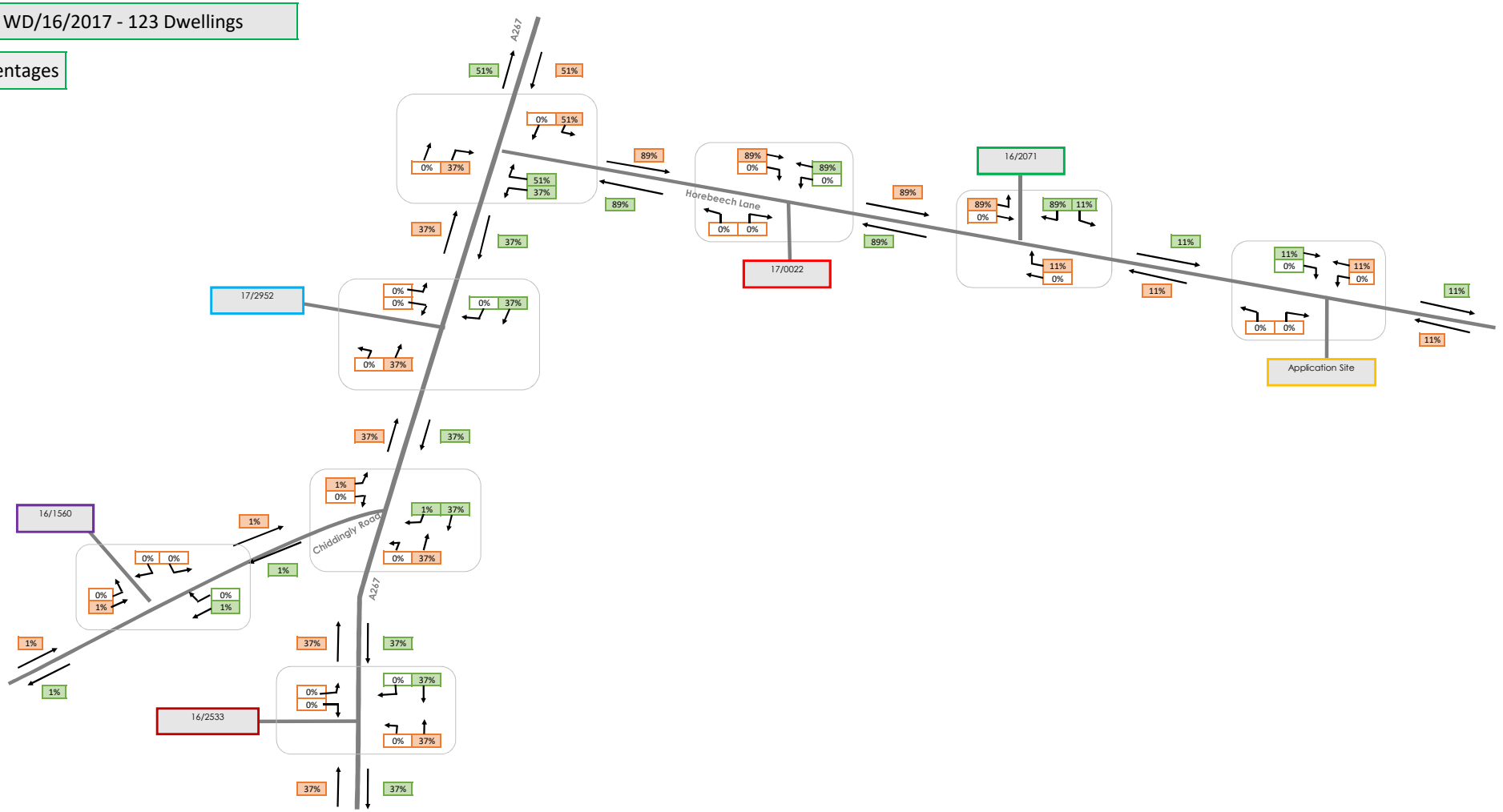
In order to protect against disclosure of personal information, records have been swapped between different geographic areas. Some counts will be affected, particularly small counts at the lowest geographies.

APPENDIX E


Application Site
Percentages
A267
Horebeech Lane
Chiddingly Road
17/2952
17/0022
16/2071
16/1560
16/2533
Application Site

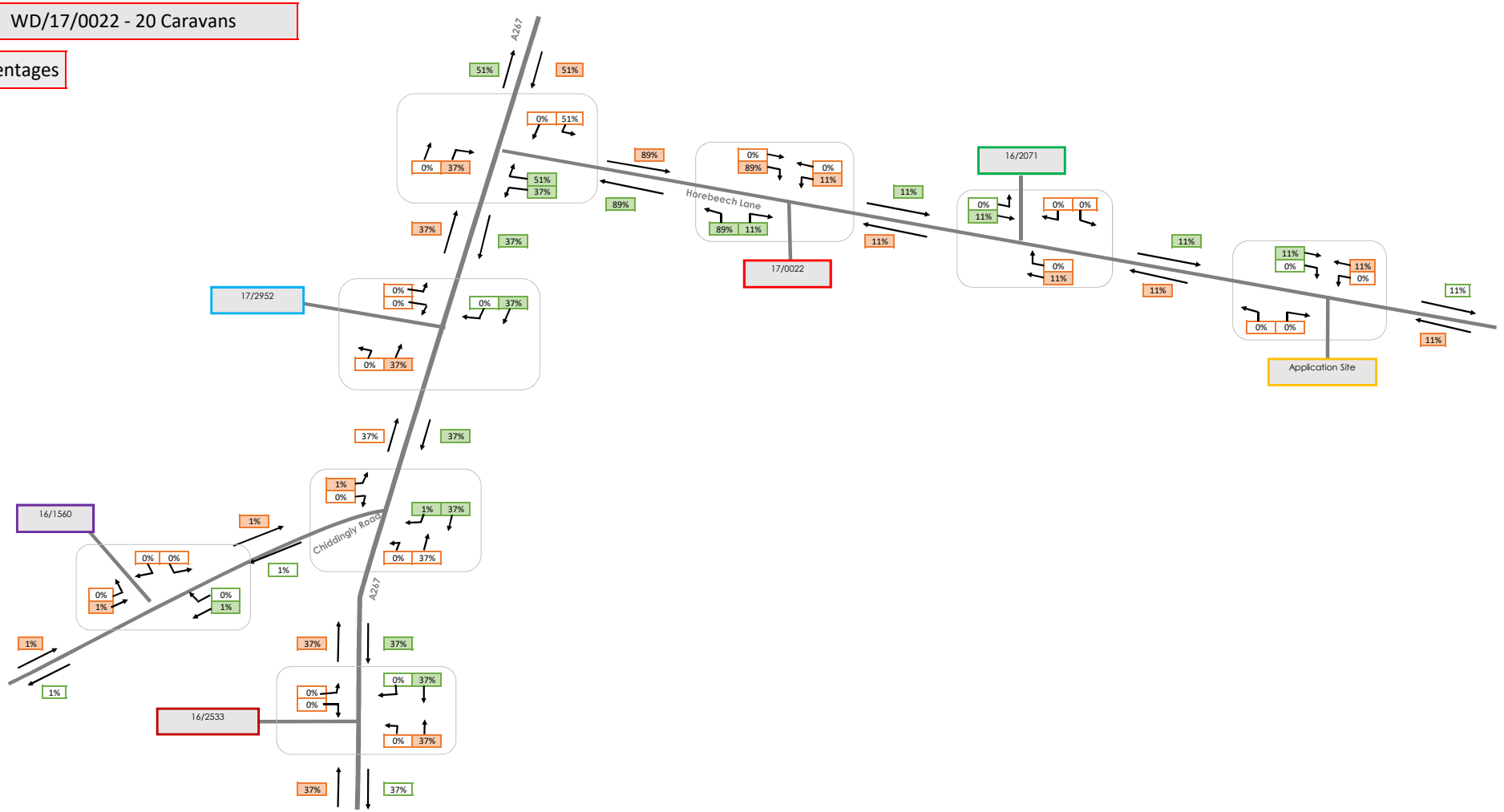
WD/16/2017 - 123 Dwellings

Percentages



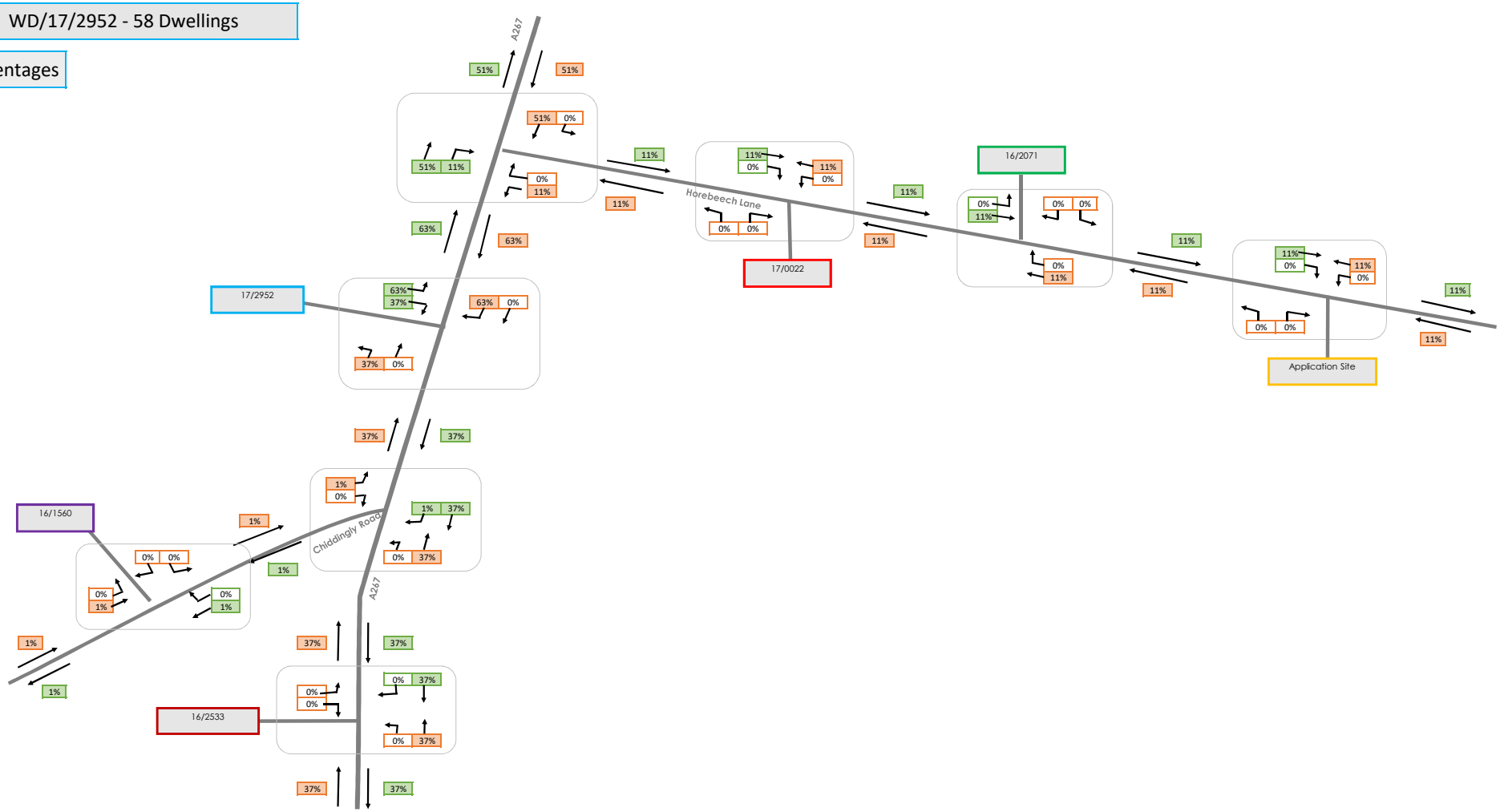
WD/17/0022 - 20 Caravans

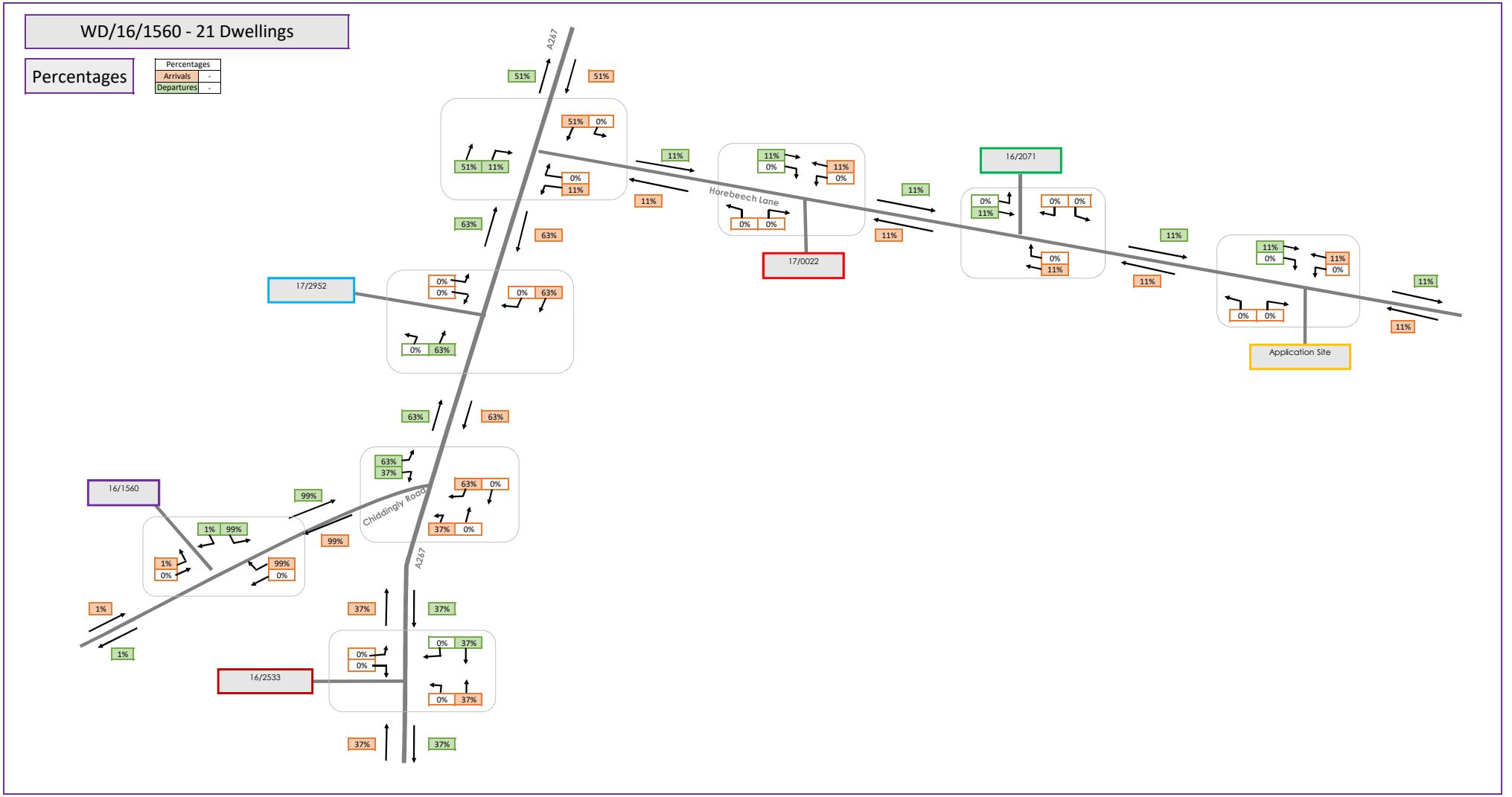
Percentages



WD/17/2952 - 58 Dwellings

Percentages



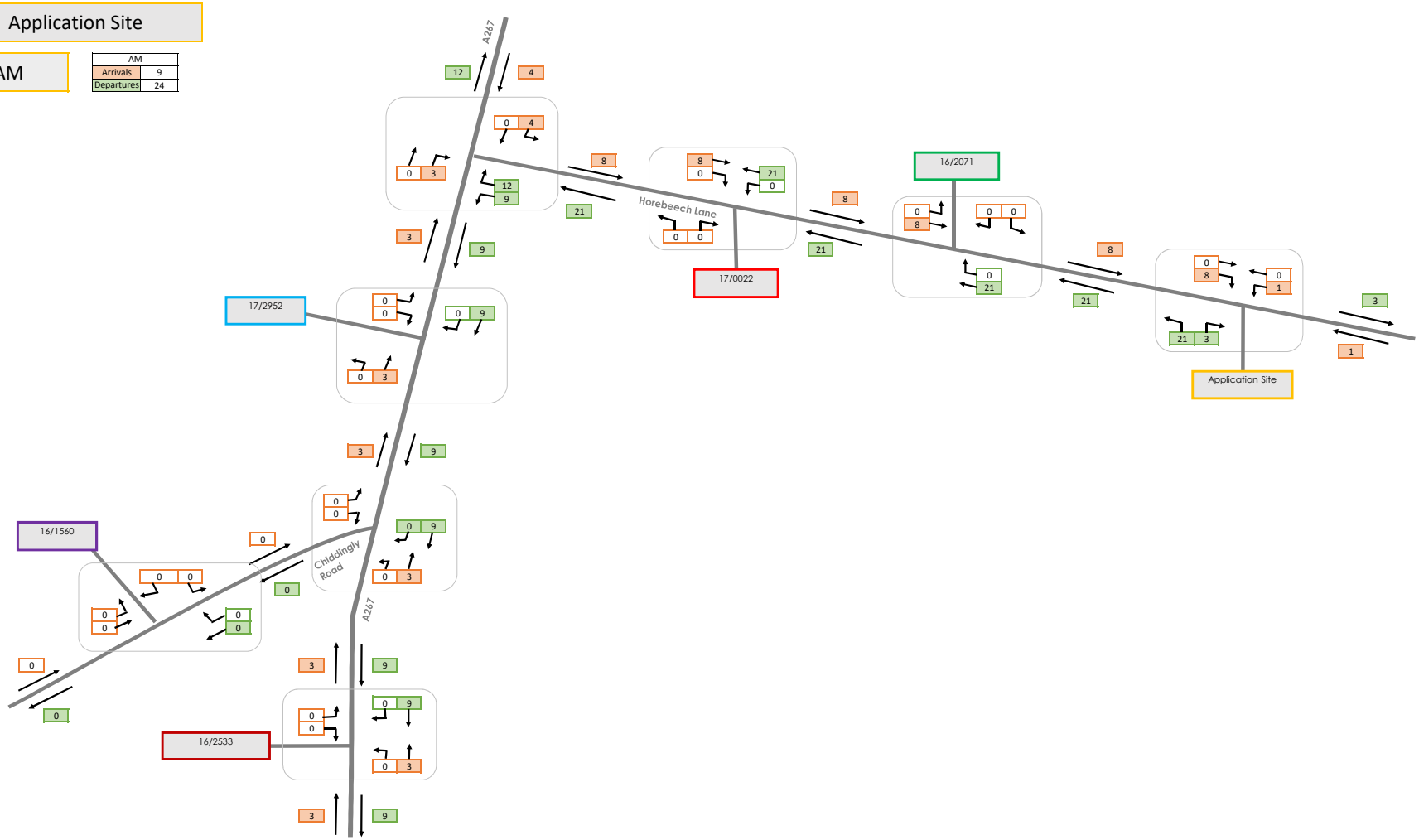

WD/16/1560 - 21 Dwellings
Percentages
Percentages
Arrivals -
Departures -
A267
Horebeech Lane
Chiddingly Road
A267
16/1560
17/2952
17/0022
16/2071
16/2533
Application Site

APPENDIX F

Application Site

AM

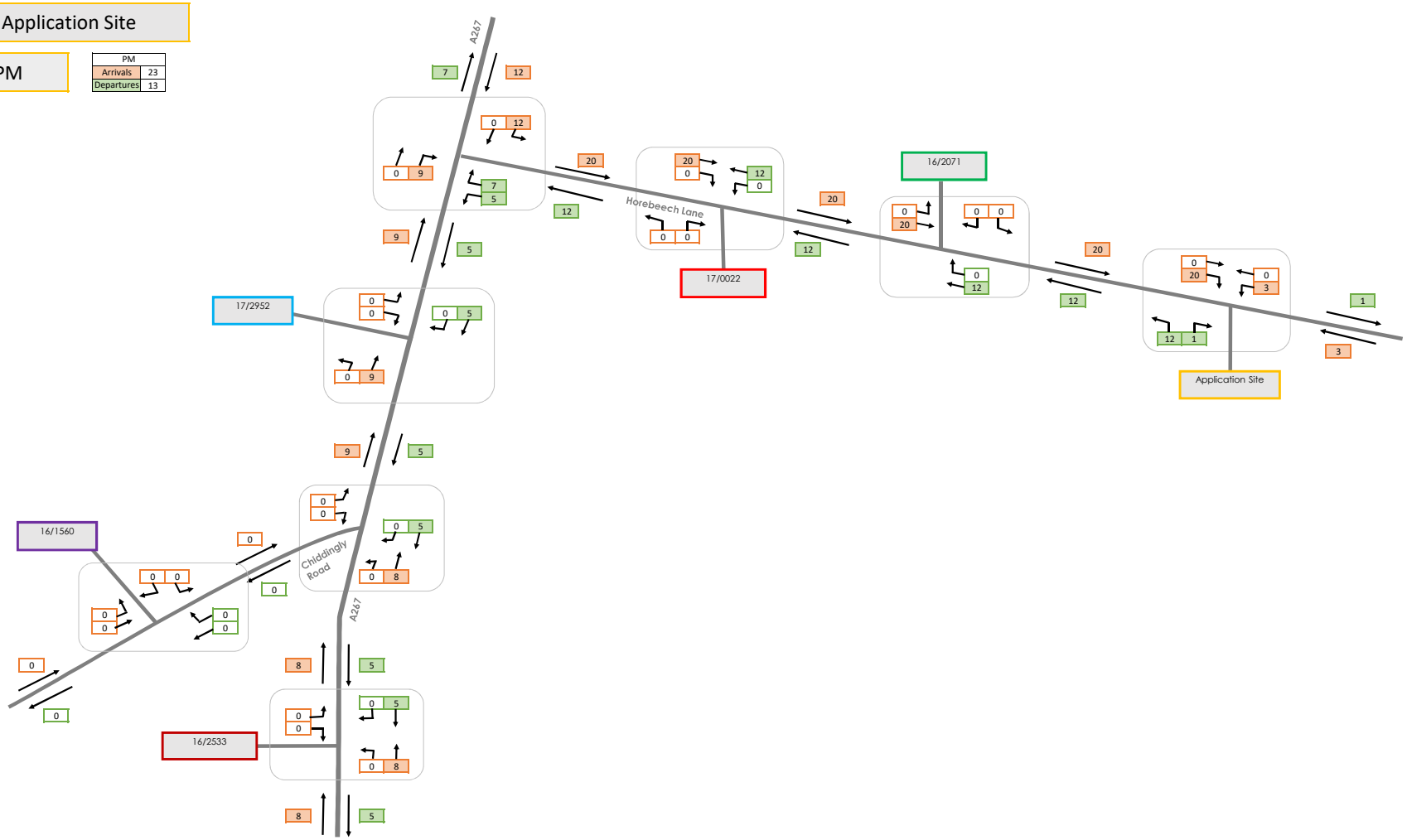
AM	
Arrivals	9
Departures	24



Application Site

PM

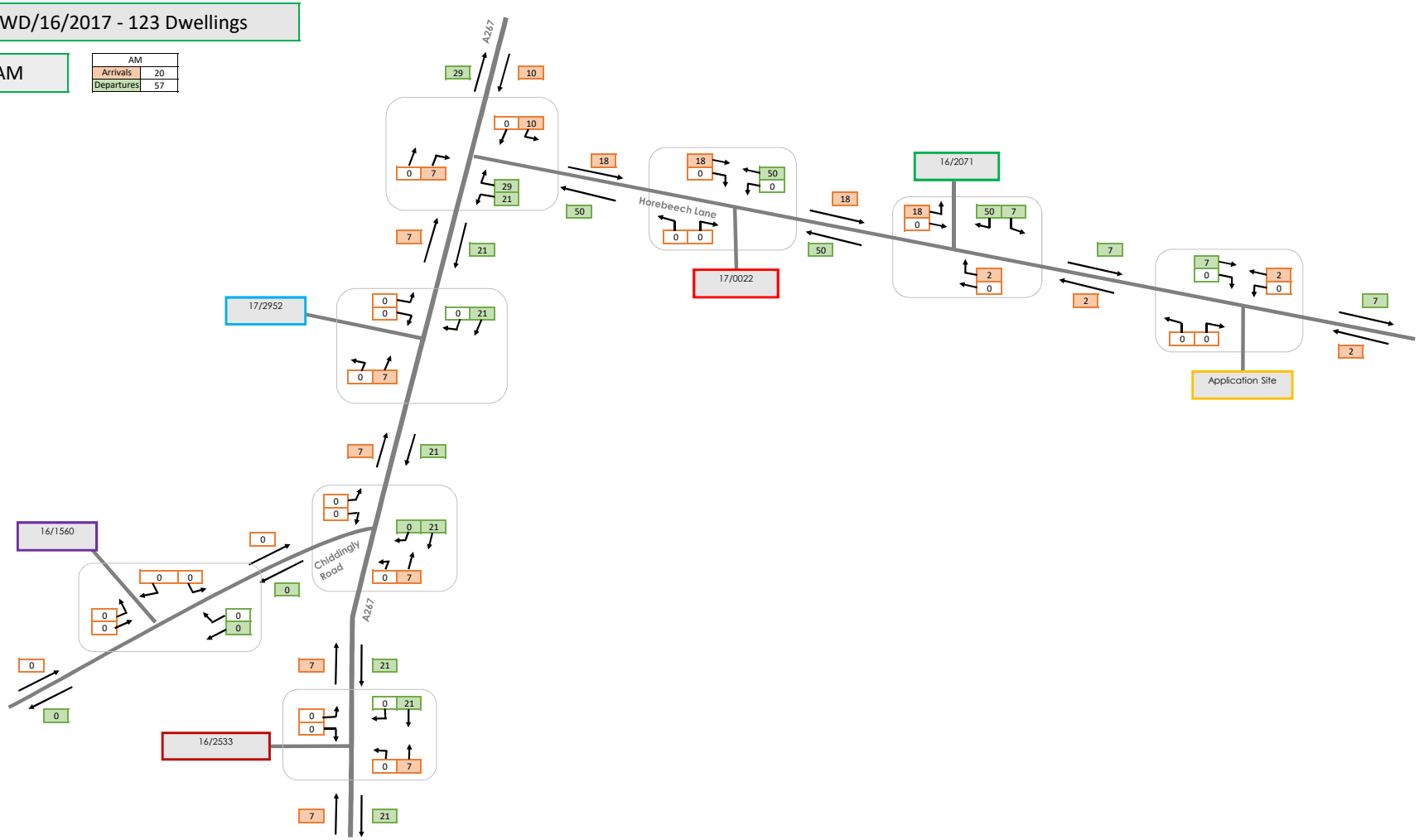
PM	
Arrivals	23
Departures	13



WD/16/2017 - 123 Dwellings

AM

AM	
Arrivals	20
Departures	57



WD/16/2017 - 123 Dwellings

PM

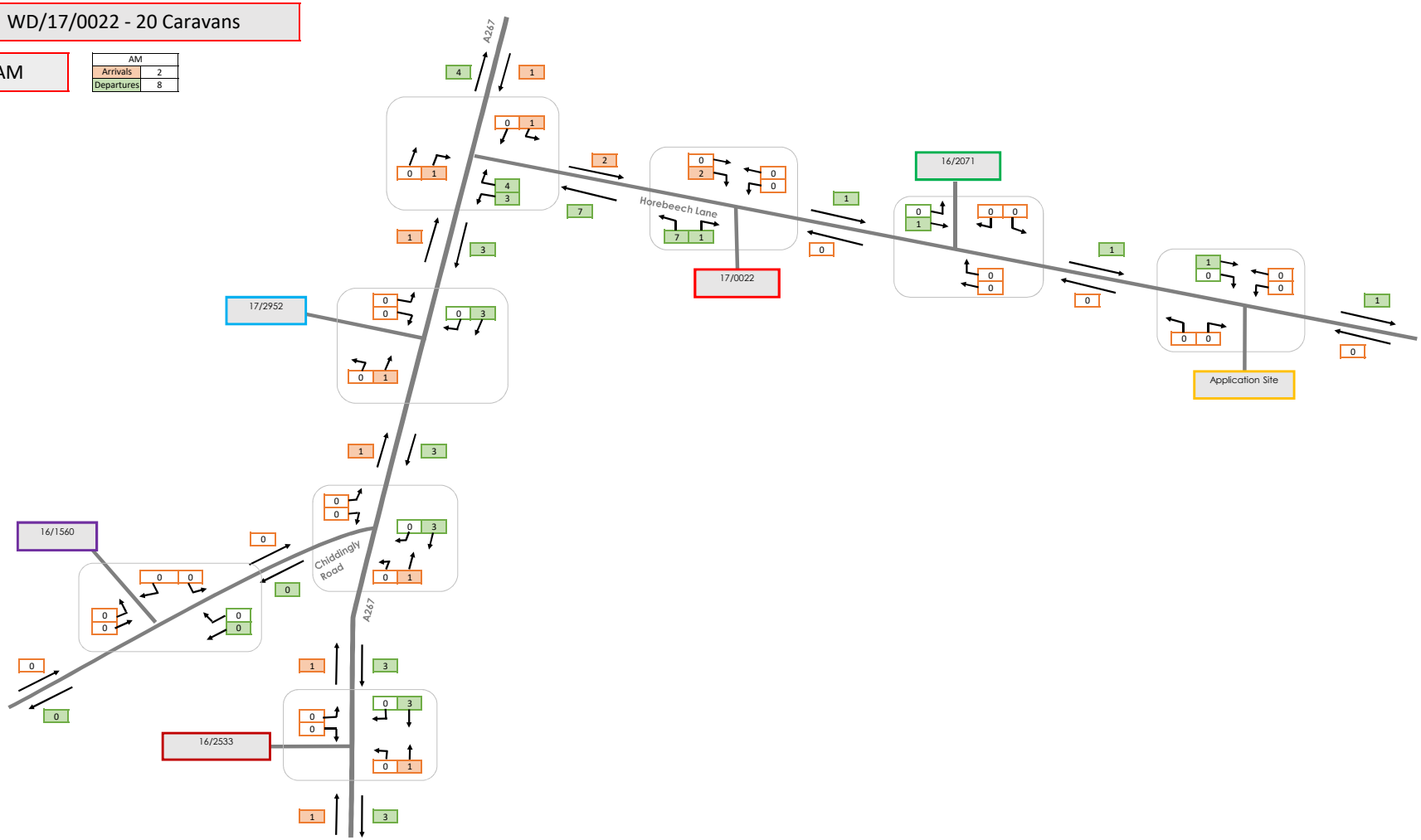
PM	
Arrivals	55
Departures	31



WD/17/0022 - 20 Caravans

AM

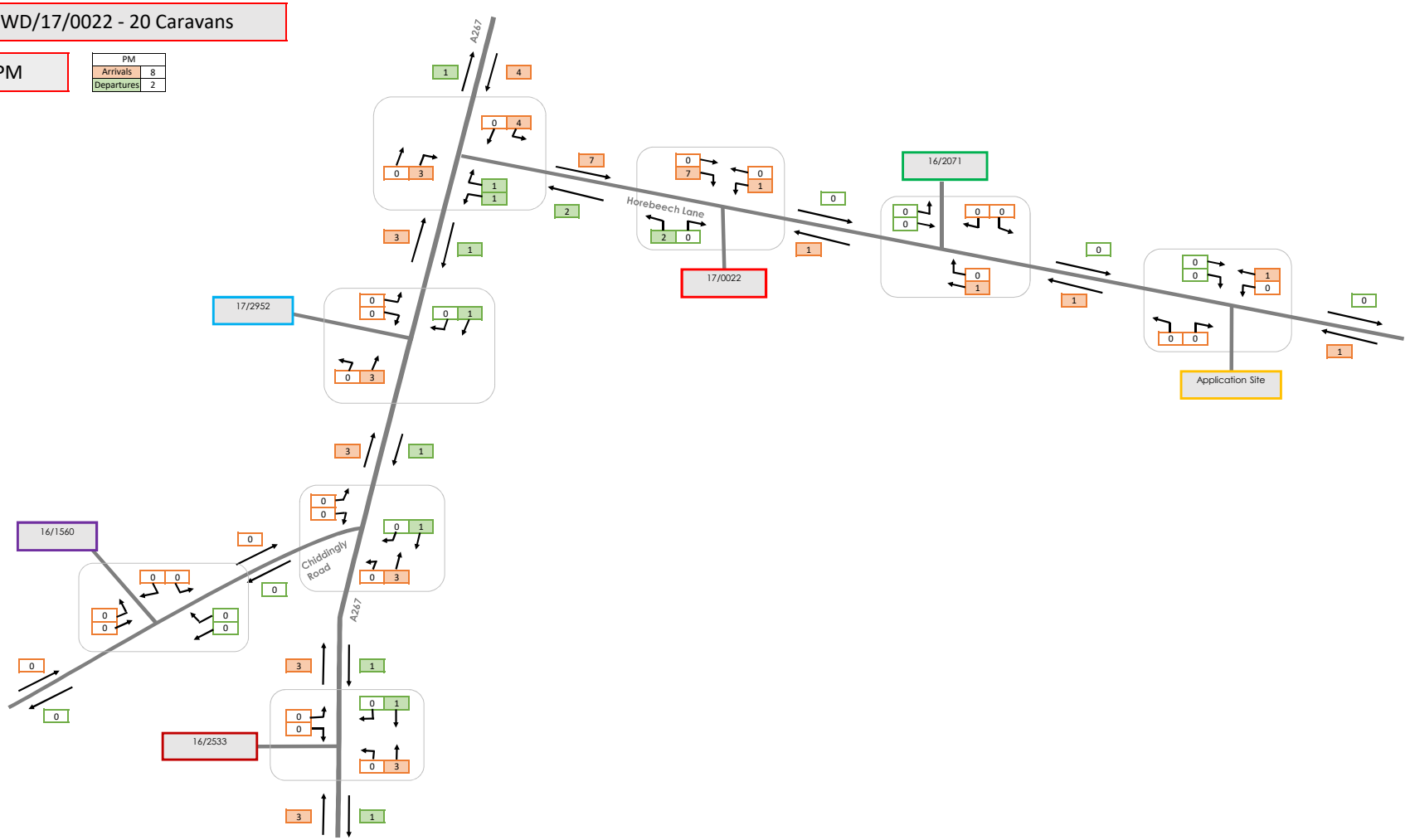
AM	
Arrivals	2
Departures	8



WD/17/0022 - 20 Caravans

PM

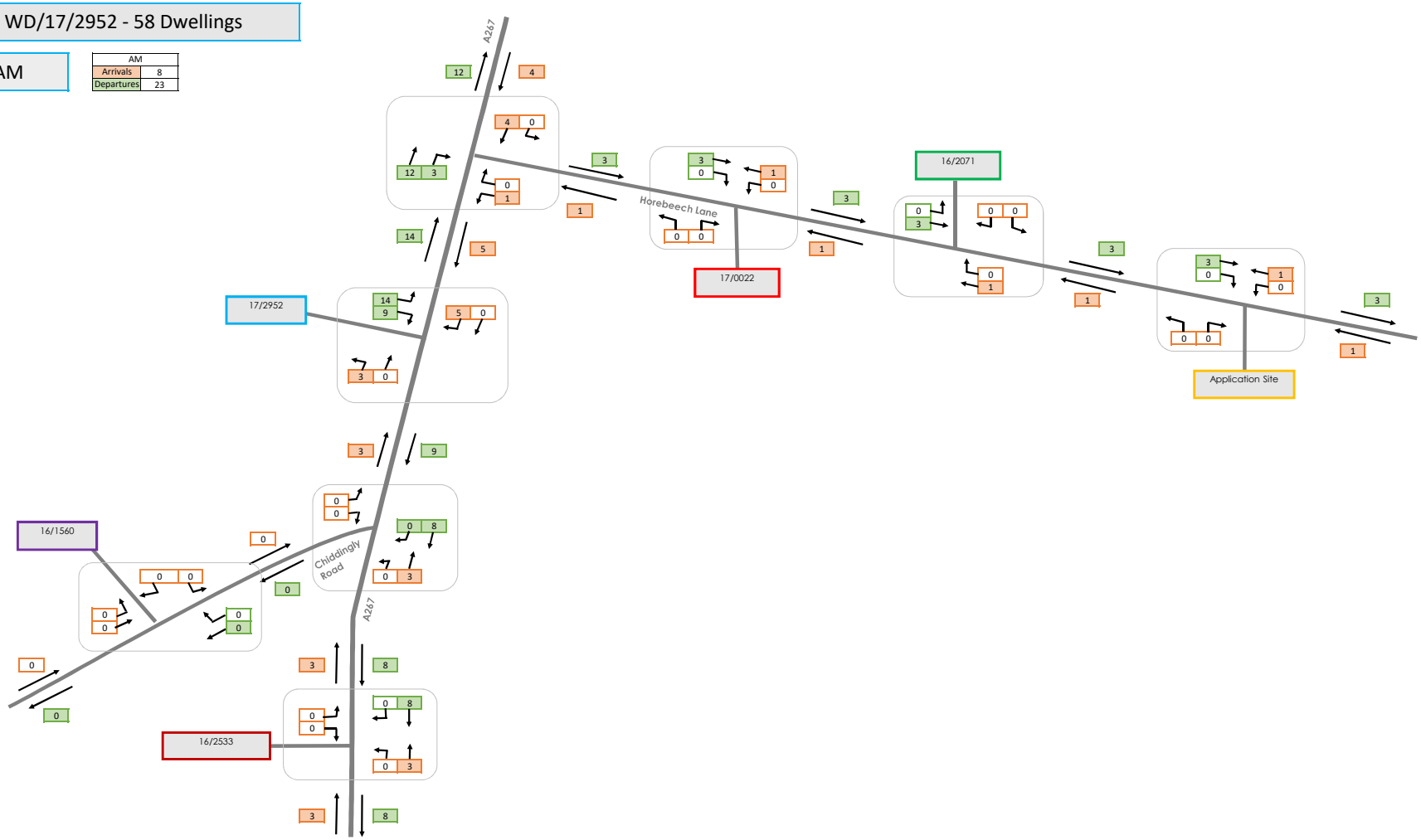
PM	
Arrivals	8
Departures	2



WD/17/2952 - 58 Dwellings

AM

AM	
Arrivals	8
Departures	23



WD/17/2952 - 58 Dwellings

PM

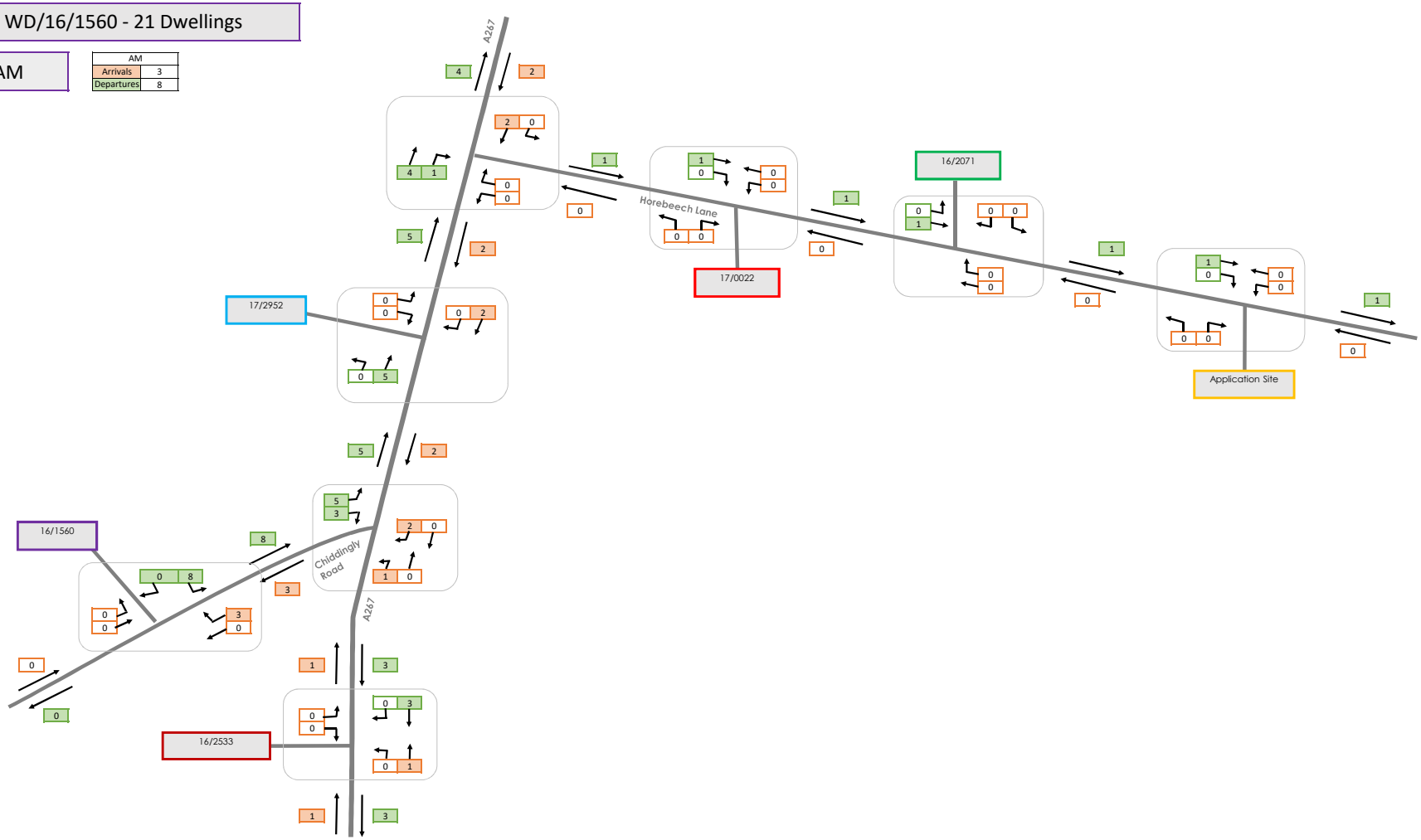
PM	
Arrivals	21
Departures	9



WD/16/1560 - 21 Dwellings

AM

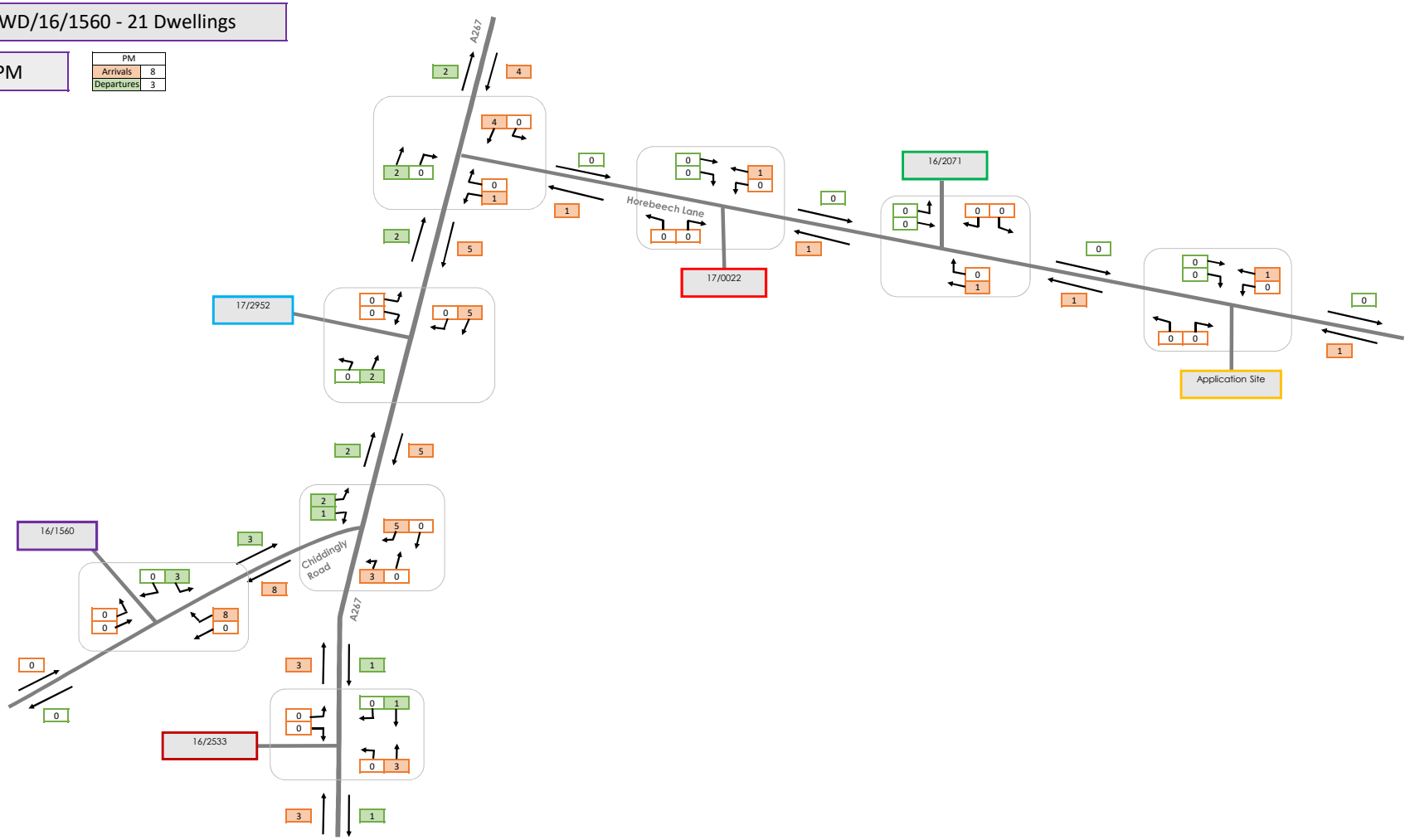
AM	
Arrivals	3
Departures	8

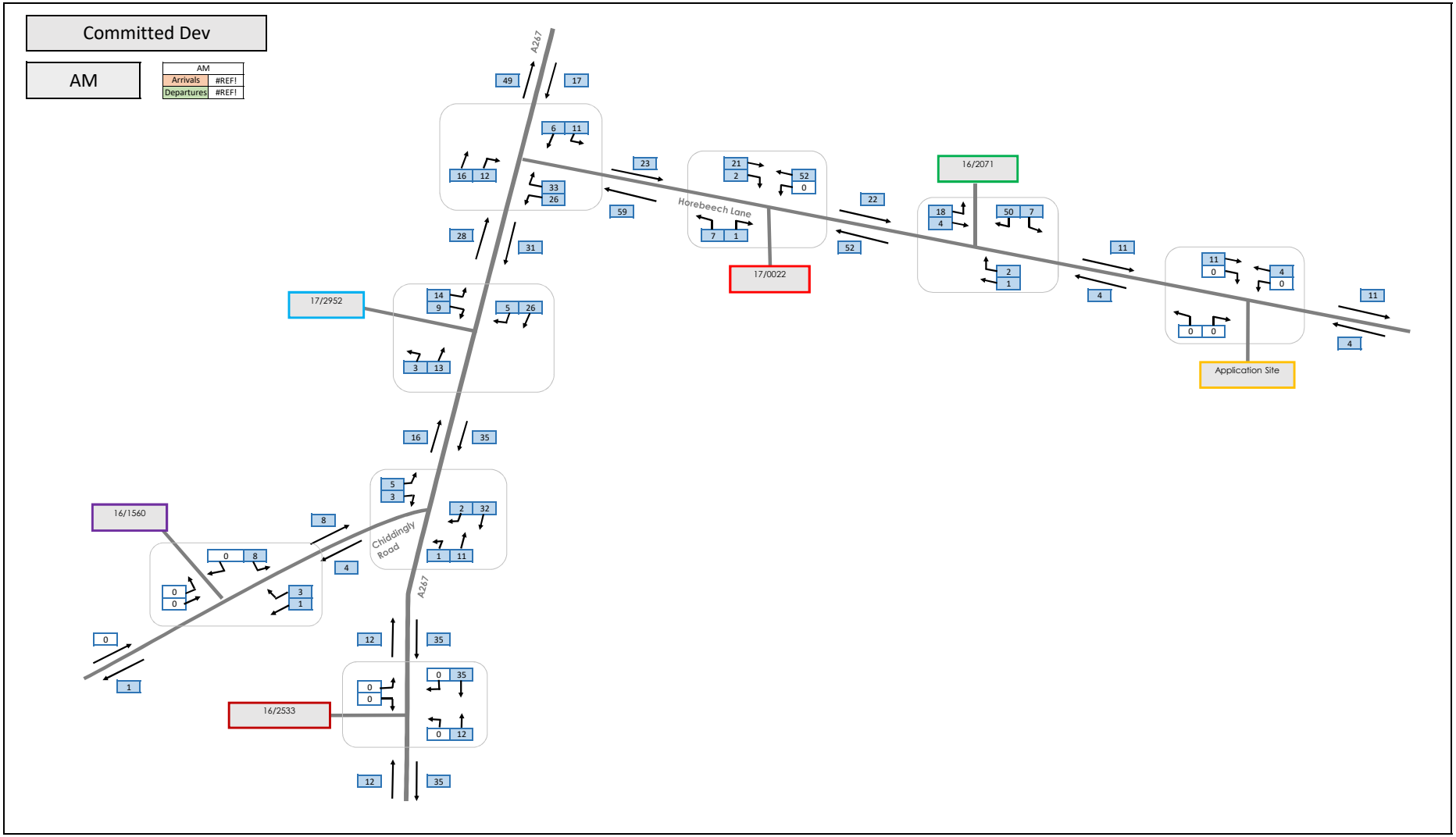


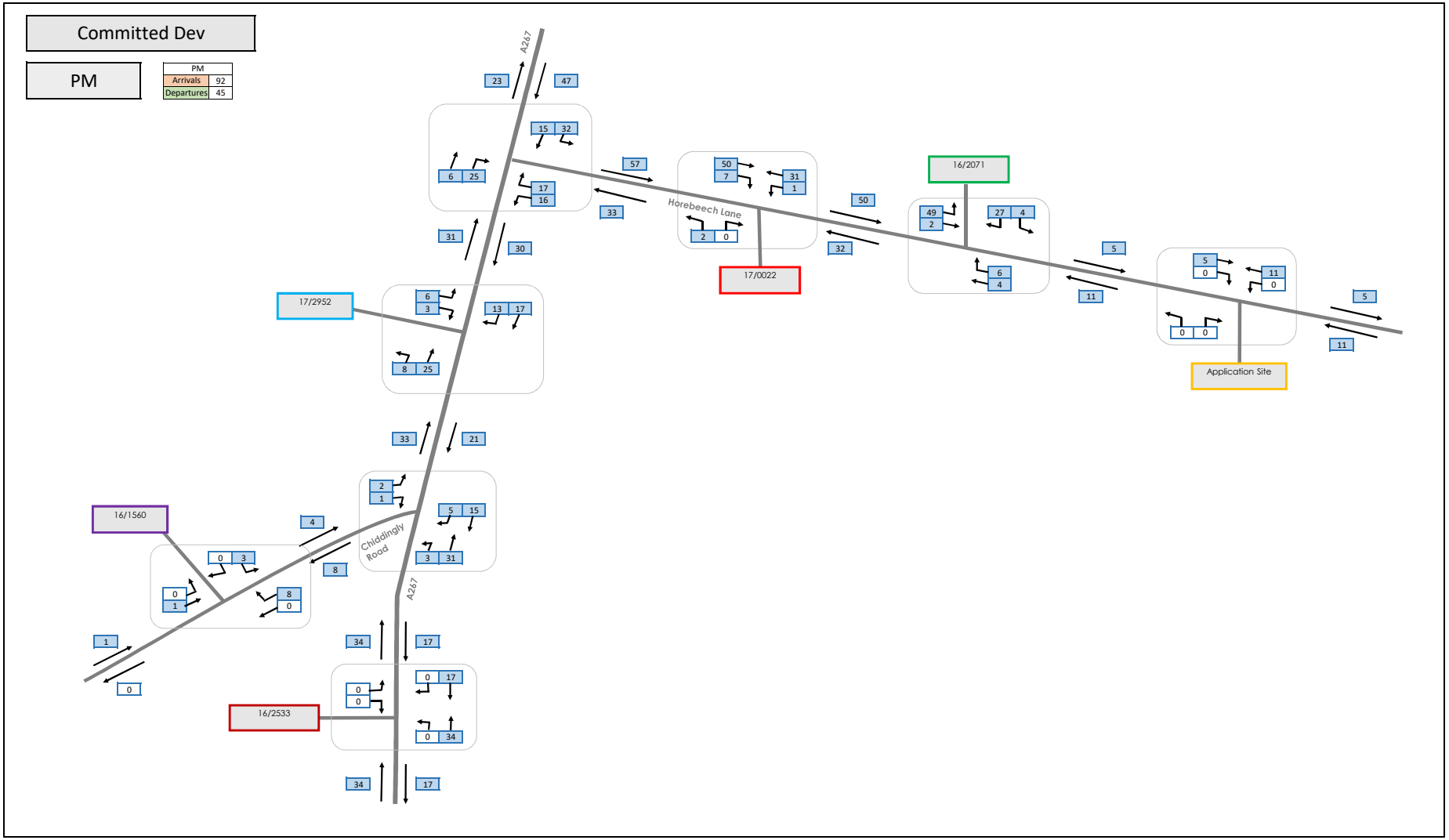
WD/16/1560 - 21 Dwellings

PM

PM	
Arrivals	8
Departures	3




Committed Dev
AM
AM
Arrivals #REF!
Departures #REF!
A267
Horebeech Lane
Chiddingly Road
16/2071
17/0022
17/2952
16/1560
16/2533
Application Site


Committed Dev
PM
PM
Arrivals 92
Departures 45
A267
Horebeech Lane
Chiddingly Road
A267
16/2071
17/0022
17/2952
16/1560
16/2533
Application Site

APPENDIX G

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

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

Filename: A267 - Horebeech Lane Mini Roundabout Assessment.arc8
Path: P:\RGP\2017 Projects (3493-3600)\3547 Horebeech Lane, Horam, East Sussex\Technical Assessments\Junction Modelling
Report generation date: 29/08/2018 12:17:26

« Mini Roundabout Junction Assessment - 2028 + Committed Development, AM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	Mini Roundabout Junction Assessment - 2028 + Committed Development			
Arm 1	1.70	9.24	0.62	A
Arm 2	1.48	17.85	0.60	C
Arm 3	31.41	126.82	1.04	F

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

"D1 - 2028 + Committed Development, AM " model duration: 08:00 - 09:30
"D2 - 2028 + Committed Development, PM" model duration: 17:00 - 18:30
"D3 - 2028 + Committed Development + Development, AM" model duration: 08:00 - 09:30
"D4 - 2028 + Committed Development + Development, PM" model duration: 17:00 - 18:30
"D5 - 2023 + Committed Development GTA, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 29/08/2018 12:17:24

File summary

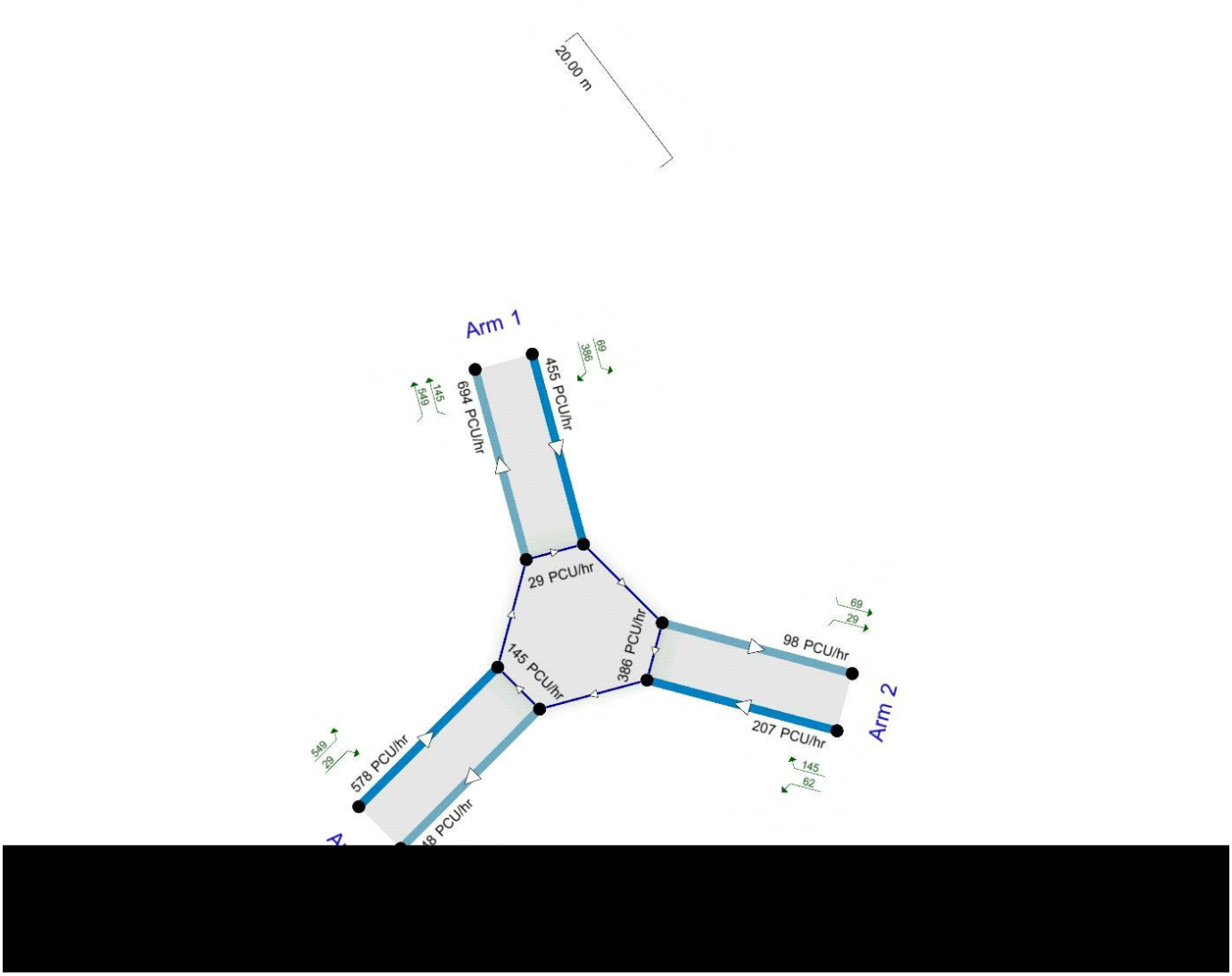
Title	A267 / Horebeech Lane Mini Roundabout
Location	
Site Number	
Date	29/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of ARCADY.

Mini Roundabout Junction Assessment - 2028 + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Mini Roundabout Junction Assessment	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 + Committed Development, AM	2028 + Committed Development	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	65.69	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	A267 (N)	
2	2	Horebeech Lane	
3	3	A267 (S)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.05	3.05	3.50	5.50	9.00	6.00	5.00	
2	2.81	2.42	3.50	5.50	7.20	5.00	0.00	
3	3.05	3.05	3.50	5.50	9.00	6.00	-2.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.775	1111.819
2		(calculated)	(calculated)	0.508	803.148
3		(calculated)	(calculated)	0.650	963.229

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	608.00	100.000
2	ONE HOUR	✓	278.00	100.000
3	ONE HOUR	✓	779.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	92.000	516.000
	2	195.000	0.000	83.000
	3	740.000	39.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.15	0.85
	2	0.70	0.00	0.30
	3	0.95	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.056	1.056
	2	1.042	1.000	1.020
	3	1.049	1.042	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	5.6	5.6
	2	4.2	0.0	2.0
	3	4.9	4.2	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.62	9.24	1.70	A
2	0.60	17.85	1.48	C
3	1.04	126.82	31.41	F

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	457.73	454.71	28.94	0.00	1089.38	0.420	0.76	5.953	A
2	209.29	207.15	385.90	0.00	606.92	0.345	0.54	9.276	A
3	586.47	578.13	145.30	0.00	868.77	0.675	2.09	12.653	B

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	546.58	545.38	34.61	0.00	1084.98	0.504	1.06	7.029	A
2	249.92	248.88	462.86	0.00	567.79	0.440	0.80	11.650	B
3	700.31	691.34	174.57	0.00	849.74	0.824	4.33	22.600	C

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	669.42	666.95	39.78	0.00	1080.97	0.619	1.67	9.126	A
2	306.08	303.48	566.03	0.00	515.34	0.594	1.45	17.376	C
3	857.69	794.64	212.87	0.00	824.84	1.040	20.09	70.579	F

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	669.42	669.33	40.67	0.00	1080.28	0.620	1.70	9.245	A
2	306.08	305.94	568.05	0.00	514.31	0.595	1.48	17.854	C
3	857.69	812.41	214.60	0.00	823.72	1.041	31.41	126.823	F

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	546.58	548.98	40.06	0.00	1080.76	0.506	1.10	7.180	A
2	249.92	252.51	465.91	0.00	566.24	0.441	0.84	11.977	B
3	700.31	800.12	177.12	0.00	848.08	0.826	6.46	83.398	F

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	457.73	459.02	30.20	0.00	1088.41	0.421	0.78	6.054	A
2	209.29	210.41	389.57	0.00	605.06	0.346	0.56	9.472	A
3	586.47	603.15	147.59	0.00	867.28	0.676	2.29	15.107	C

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

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

Filename: A267 - Horebeech Lane Mini Roundabout Assessment.arc8
Path: P:\RGP\2017 Projects (3493-3600)\3547 Horebeech Lane, Horam, East Sussex\Technical Assessments\Junction Modelling
Report generation date: 29/08/2018 12:18:10

« Mini Roundabout Junction Assessment - 2028 + Committed Development, PM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	Mini Roundabout Junction Assessment - 2028 + Committed Development			
Arm 1	107.93	355.42	1.18	F
Arm 2	0.70	16.96	0.42	C
Arm 3	5.09	25.47	0.84	D

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

"D1 - 2028 + Committed Development, AM" model duration: 08:00 - 09:30
"D2 - 2028 + Committed Development, PM " model duration: 17:00 - 18:30
"D3 - 2028 + Committed Development + Development, AM" model duration: 08:00 - 09:30
"D4 - 2028 + Committed Development + Development, PM" model duration: 17:00 - 18:30
"D5 - 2023 + Committed Development GTA, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 29/08/2018 12:18:08

File summary

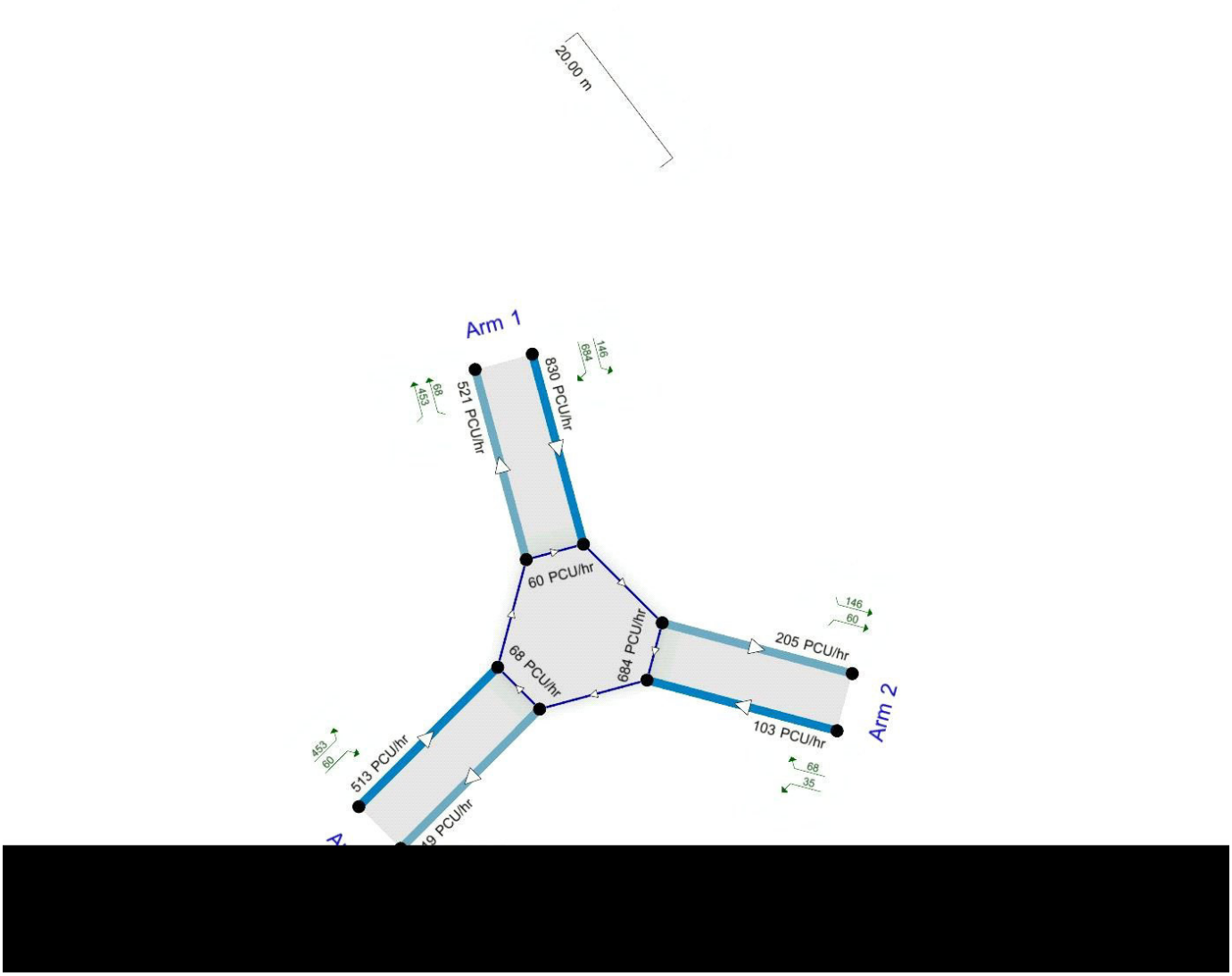
Title	A267 / Horebeech Lane Mini Roundabout
Location	
Site Number	
Date	29/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of ARCADY.

Mini Roundabout Junction Assessment - 2028 + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Mini Roundabout Junction Assessment	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 + Committed Development, PM	2028 + Committed Development	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	214.84	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	A267 (N)	
2	2	Horebeech Lane	
3	3	A267 (S)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.05	3.05	3.50	5.50	9.00	6.00	5.00	
2	2.81	2.42	3.50	5.50	7.20	5.00	0.00	
3	3.05	3.05	3.50	5.50	9.00	6.00	-2.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.775	1111.819
2		(calculated)	(calculated)	0.508	803.148
3		(calculated)	(calculated)	0.650	963.229

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1121.00	100.000
2	ONE HOUR	✓	138.00	100.000
3	ONE HOUR	✓	688.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	197.000	924.000
	2	91.000	0.000	47.000
	3	608.000	80.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.18	0.82
	2	0.66	0.00	0.34
	3	0.88	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.021	1.025
	2	1.015	1.000	1.000
	3	1.027	1.021	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	2.1	2.5
	2	1.5	0.0	0.0
	3	2.7	2.1	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.18	355.42	107.93	F
2	0.42	16.96	0.70	C
3	0.84	25.47	5.09	D

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	843.95	829.55	59.63	0.00	1065.59	0.792	3.60	14.835	B
2	103.89	102.72	683.77	0.00	455.47	0.228	0.29	10.273	B
3	517.96	512.78	67.73	0.00	919.19	0.564	1.29	8.981	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1007.76	977.95	71.55	0.00	1056.34	0.954	11.05	37.242	E
2	124.06	123.41	806.09	0.00	393.27	0.315	0.46	13.440	B
3	618.50	615.32	81.38	0.00	910.32	0.679	2.09	12.385	B

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1234.24	1038.26	86.84	0.00	1044.49	1.182	60.05	135.145	F
2	151.94	151.01	855.80	0.00	367.99	0.413	0.69	16.681	C
3	757.50	746.78	99.58	0.00	898.49	0.843	4.77	22.851	C

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1234.24	1042.71	87.93	0.00	1043.64	1.183	107.93	297.445	F
2	151.94	151.88	859.47	0.00	366.13	0.415	0.70	16.958	C
3	757.50	756.21	100.15	0.00	898.12	0.843	5.09	25.468	D

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1007.76	1045.12	73.23	0.00	1055.04	0.955	98.59	355.424	F
2	124.06	124.75	861.46	0.00	365.12	0.340	0.53	15.168	C
3	618.50	629.79	82.26	0.00	909.75	0.680	2.27	13.684	B

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	843.95	1053.84	60.65	0.00	1064.79	0.793	46.12	249.698	F
2	103.89	104.36	868.64	0.00	361.46	0.287	0.42	14.168	B
3	517.96	521.62	68.82	0.00	918.49	0.564	1.36	9.394	A

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

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

Filename: A267 - Horebeech Lane Mini Roundabout Assessment.arc8
Path: P:\RGP\2017 Projects (3493-3600)\3547 Horebeech Lane, Horam, East Sussex\Technical Assessments\Junction Modelling
Report generation date: 29/08/2018 12:18:54

« Mini Roundabout Junction Assessment - 2028 + Committed Development + Development, AM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	Mini Roundabout Junction Assessment - 2028 + Committed Development + Development			
Arm 1	1.74	9.39	0.62	A
Arm 2	1.79	20.05	0.64	C
Arm 3	35.82	142.16	1.06	F

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

"D1 - 2028 + Committed Development, AM" model duration: 08:00 - 09:30
"D2 - 2028 + Committed Development, PM" model duration: 17:00 - 18:30
"D3 - 2028 + Committed Development + Development, AM " model duration: 08:00 - 09:30
"D4 - 2028 + Committed Development + Development, PM" model duration: 17:00 - 18:30
"D5 - 2023 + Committed Development GTA, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 29/08/2018 12:18:53

File summary

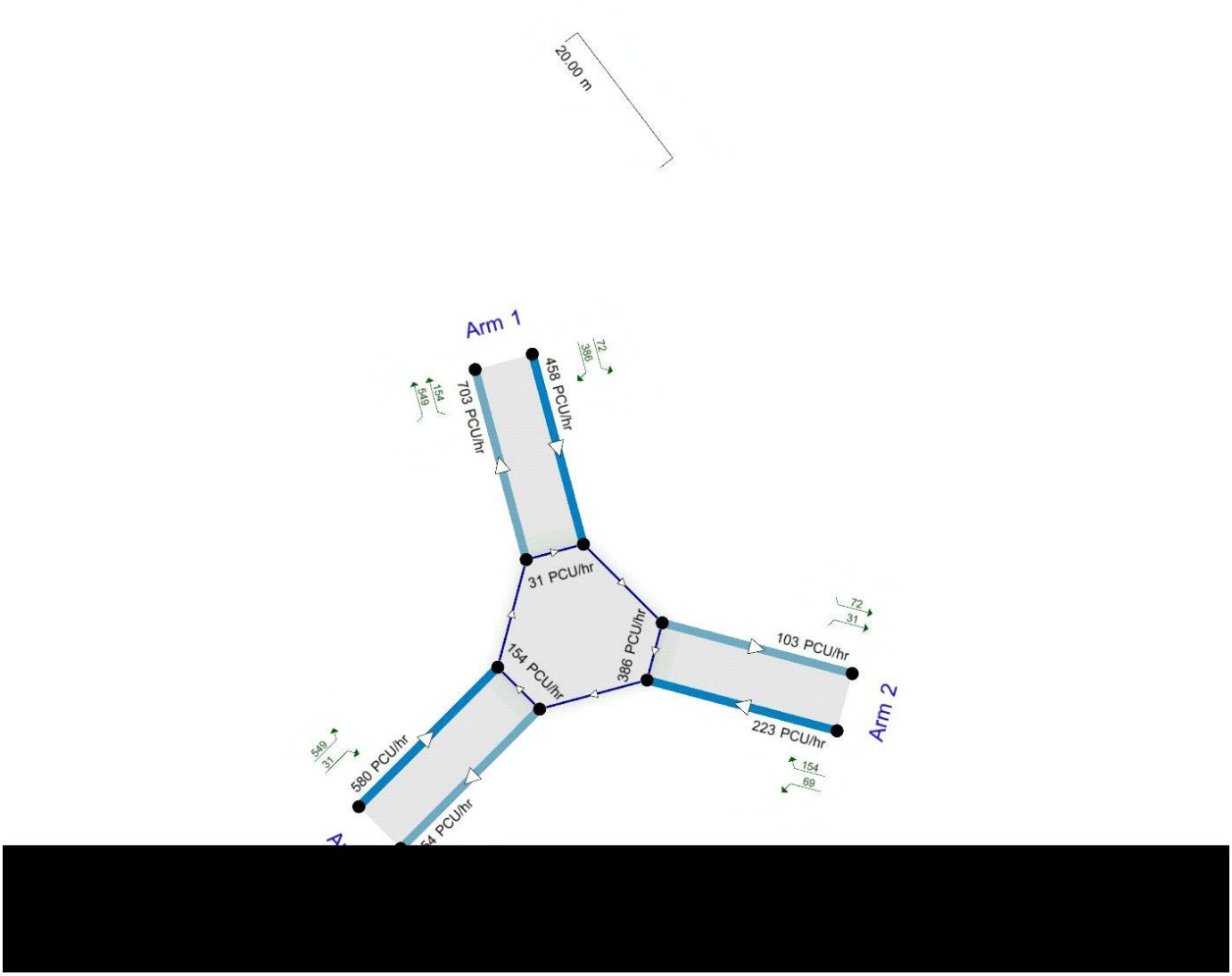
Title	A267 / Horebeech Lane Mini Roundabout
Location	
Site Number	
Date	29/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of ARCADY.

Mini Roundabout Junction Assessment - 2028 + Committed Development + Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Mini Roundabout Junction Assessment	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 + Committed Development + Development, AM	2028 + Committed Development + Development	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	72.60	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	A267 (N)	
2	2	Horebeech Lane	
3	3	A267 (S)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.05	3.05	3.50	5.50	9.00	6.00	5.00	
2	2.81	2.42	3.50	5.50	7.20	5.00	0.00	
3	3.05	3.05	3.50	5.50	9.00	6.00	-2.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.775	1111.819
2		(calculated)	(calculated)	0.508	803.148
3		(calculated)	(calculated)	0.650	963.229

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	612.00	100.000
2	ONE HOUR	✓	299.00	100.000
3	ONE HOUR	✓	782.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	96.000	516.000
	2	207.000	0.000	92.000
	3	740.000	42.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.16	0.84
	2	0.69	0.00	0.31
	3	0.95	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.056	1.056
	2	1.042	1.000	1.020
	3	1.049	1.042	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	5.6	5.6
	2	4.2	0.0	2.0
	3	4.9	4.2	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	0.62	9.39	1.74	A
2	0.64	20.05	1.79	C
3	1.06	142.16	35.82	F

Main Results for each time segment

Main results: (08:00-08:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	460.75	457.68	31.16	0.00	1087.66	0.424	0.77	6.006	A
2	225.10	222.70	385.88	0.00	606.93	0.371	0.60	9.640	A
3	588.73	580.13	154.18	0.00	863.00	0.682	2.15	12.983	B

Main results: (08:15-08:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	550.18	548.95	37.24	0.00	1082.95	0.508	1.07	7.108	A
2	268.79	267.56	462.84	0.00	567.80	0.473	0.91	12.359	B
3	703.00	693.29	185.24	0.00	842.81	0.834	4.58	23.783	C

Main results: (08:30-08:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	673.82	671.27	42.46	0.00	1078.90	0.625	1.71	9.267	A
2	329.21	325.91	565.98	0.00	515.36	0.639	1.73	19.333	C
3	861.00	790.48	225.63	0.00	816.55	1.054	22.21	76.515	F

Main results: (08:45-09:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	673.82	673.73	43.32	0.00	1078.23	0.625	1.74	9.392	A
2	329.21	328.99	568.05	0.00	514.31	0.640	1.79	20.048	C
3	861.00	806.56	227.76	0.00	815.16	1.056	35.82	142.164	F

Main results: (09:00-09:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	550.18	552.64	43.75	0.00	1077.90	0.510	1.12	7.270	A
2	268.79	272.10	465.95	0.00	566.22	0.475	0.96	12.805	B
3	703.00	814.50	188.38	0.00	840.76	0.836	7.94	103.590	F

Main results: (09:15-09:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	460.75	462.07	32.82	0.00	1086.37	0.424	0.79	6.104	A
2	225.10	226.45	389.59	0.00	605.05	0.372	0.62	9.876	A
3	588.73	611.01	156.77	0.00	861.31	0.684	2.37	16.284	C

Junctions 8

ARCADY 8 - Roundabout Module

Version: 8.0.4.487 [15039,24/03/2014]
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

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

Filename: A267 - Horebeech Lane Mini Roundabout Assessment.arc8
Path: P:\RGP\2017 Projects (3493-3600)\3547 Horebeech Lane, Horam, East Sussex\Technical Assessments\Junction Modelling
Report generation date: 29/08/2018 12:21:17

« Mini Roundabout Junction Assessment - 2028 + Committed Development + Development, PM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	Mini Roundabout Junction Assessment - 2028 + Committed Development + Development			
Arm 1	119.53	404.08	1.20	F
Arm 2	0.78	17.40	0.44	C
Arm 3	5.67	28.14	0.86	D

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

"D1 - 2028 + Committed Development, AM" model duration: 08:00 - 09:30
"D2 - 2028 + Committed Development, PM" model duration: 17:00 - 18:30
"D3 - 2028 + Committed Development + Development, AM" model duration: 08:00 - 09:30
"D4 - 2028 + Committed Development + Development, PM " model duration: 17:00 - 18:30
"D5 - 2023 + Committed Development GTA, PM" model duration: 17:00 - 18:30

Run using Junctions 8.0.4.487 at 29/08/2018 12:21:15

File summary

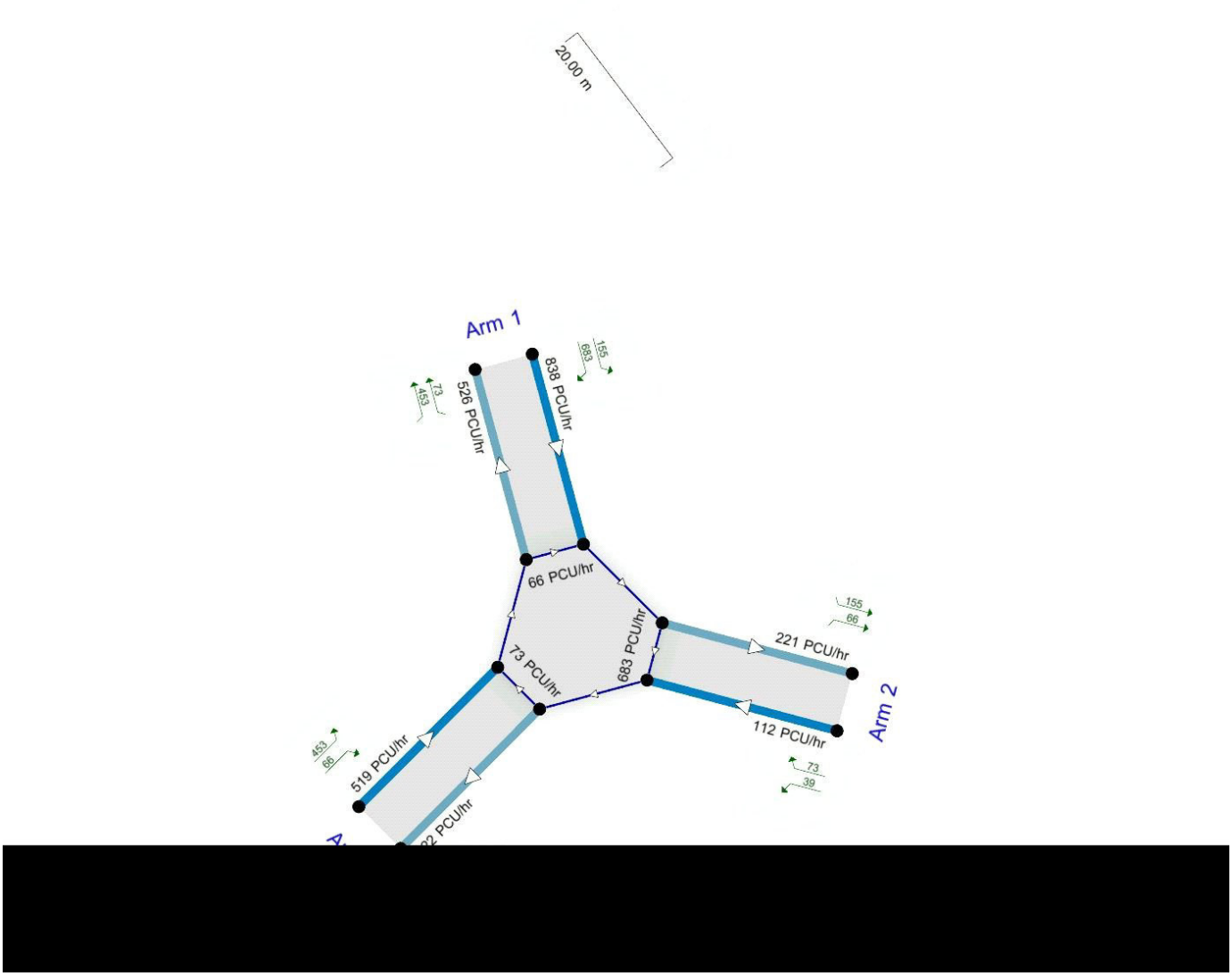
Title	A267 / Horebeech Lane Mini Roundabout
Location	
Site Number	
Date	29/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of ARCADY.

Mini Roundabout Junction Assessment - 2028 + Committed Development + Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Mini Roundabout Junction Assessment	ARCADY			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 + Committed Development + Development, PM	2028 + Committed Development + Development	PM		ONE HOUR	17:00	18:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Mini-roundabout	1,2,3	242.45	F

Junction Network Options

Driving Side	Lighting	Road Surface	In London
Left	Normal/unknown	Normal/unknown	

Arms

Arms

Arm	Arm	Name	Description
1	1	A267 (N)	
2	2	Horebeech Lane	
3	3	A267 (S)	

Capacity Options

Arm	Minimum Capacity (PCU/hr)	Maximum Capacity (PCU/hr)
1	0.00	99999.00
2	0.00	99999.00
3	0.00	99999.00

Mini Roundabout Geometry

Arm	Approach road half-width (m)	Minimum approach road half-width (m)	Entry width (m)	Effective flare length (m)	Distance to next arm (m)	Entry corner kerb line distance (m)	Gradient over 50m (%)	Kerbed central island
1	3.05	3.05	3.50	5.50	9.00	6.00	5.00	
2	2.81	2.42	3.50	5.50	7.20	5.00	0.00	
3	3.05	3.05	3.50	5.50	9.00	6.00	-2.50	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Arm	Enter slope and intercept directly	Entered slope	Entered intercept (PCU/hr)	Final Slope	Final Intercept (PCU/hr)
1		(calculated)	(calculated)	0.775	1111.819
2		(calculated)	(calculated)	0.508	803.148
3		(calculated)	(calculated)	0.650	963.229

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
1	ONE HOUR	✓	1133.00	100.000
2	ONE HOUR	✓	150.00	100.000
3	ONE HOUR	✓	697.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.000	209.000	924.000
	2	98.000	0.000	52.000
	3	608.000	89.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.00	0.18	0.82
	2	0.65	0.00	0.35
	3	0.87	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		1	2	3
From	1	1.000	1.021	1.025
	2	1.015	1.000	1.000
	3	1.027	1.021	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		1	2	3
From	1	0.0	2.1	2.5
	2	1.5	0.0	0.0
	3	2.7	2.1	0.0

Results

Results Summary for whole modelled period

Arm	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
1	1.20	404.08	119.53	F
2	0.44	17.40	0.78	C
3	0.86	28.14	5.67	D

Main Results for each time segment

Main results: (17:00-17:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	852.98	837.58	66.32	0.00	1060.40	0.804	3.85	15.622	C
2	112.93	111.62	683.08	0.00	455.82	0.248	0.33	10.522	B
3	524.74	519.36	72.92	0.00	915.82	0.573	1.34	9.198	A

Main results: (17:15-17:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1018.54	983.22	79.57	0.00	1050.12	0.970	12.68	41.372	E
2	134.85	134.11	801.85	0.00	395.42	0.341	0.51	13.870	B
3	626.59	623.16	87.62	0.00	906.27	0.691	2.20	12.888	B

Main results: (17:30-17:45)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1247.46	1032.20	96.43	0.00	1037.05	1.203	66.49	149.599	F
2	165.15	164.12	841.79	0.00	375.11	0.440	0.77	17.140	C
3	767.41	755.21	107.22	0.00	893.52	0.859	5.25	24.731	C

Main results: (17:45-18:00)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1247.46	1035.30	97.78	0.00	1036.01	1.204	119.53	330.316	F
2	165.15	165.09	844.32	0.00	373.83	0.442	0.78	17.402	C
3	767.41	765.74	107.86	0.00	893.11	0.859	5.67	28.136	D

Main results: (18:00-18:15)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	1018.54	1039.58	81.68	0.00	1048.49	0.971	114.27	404.079	F
2	134.85	135.63	847.82	0.00	372.05	0.362	0.59	15.428	C
3	626.59	639.64	88.61	0.00	905.62	0.692	2.41	14.507	B

Main results: (18:15-18:30)

Arm	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Circulating Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
1	852.98	1050.06	67.51	0.00	1059.47	0.805	65.00	309.135	F
2	112.93	113.45	856.36	0.00	367.71	0.307	0.46	14.327	B
3	524.74	528.73	74.12	0.00	915.04	0.573	1.41	9.659	A

APPENDIX H

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

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

Filename: A267 - Horebeech Lane Proposed Priority Junction Assessment.arc8
Path: P:\RGP\2017 Projects (3493-3600)\3547 Horebeech Lane, Horam, East Sussex\Technical Assessments\Junction Modelling
Report generation date: 30/08/2018 10:47:11

« Priority Junction Assessment - 2028 + Committed Development, AM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	Priority Junction Assessment - 2028 + Committed Development			
Stream B-C	0.64	26.17	0.40	D
Stream B-A	3.74	67.69	0.81	F
Stream C-AB	0.10	8.54	0.09	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2028 + Committed Development, AM " model duration: 08:00 - 09:30
"D2 - 2028 + Committed Development, PM" model duration: 08:00 - 09:30
"D3 - 2028 + Committed Development + Development, AM" model duration: 08:00 - 09:30
"D4 - 2028 + Committed Development + Development, PM" model duration: 08:00 - 09:30

Run using Junctions 8.0.4.487 at 30/08/2018 10:47:09

File summary

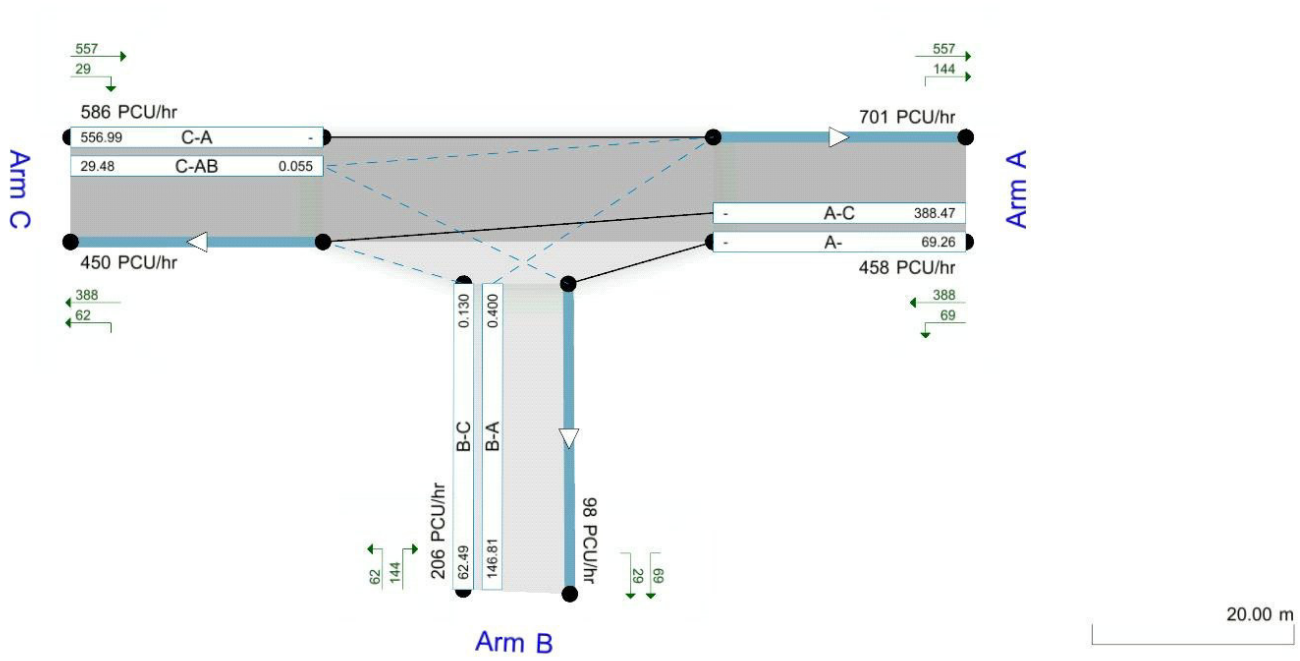
Title	A267 - Horebeech Lane Priority Junction Assessment
Location	
Site Number	
Date	29/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of ARCADY.

Priority Junction Assessment - 2028 + Committed Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Priority Junction Assessment	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 + Committed Development, AM	2028 + Committed Development	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	49.49	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A267 (N)		Major
B	B	Horebeech Lane		Minor
C	C	A267 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.09		0.00	✓	2.20	120.00	✓	2.00

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)	Lane Width (Left) (m)	Lane Width (Right) (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	One lane plus flare				10.00	6.79	4.50	4.00	4.00		2.00	21	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	583.762	0.106	0.268	0.168	0.382
1	B-C	650.895	0.099	0.251	-	-
1	C-B	643.457	0.248	0.248	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	608.00	100.000
B	ONE HOUR	✓	278.00	100.000
C	ONE HOUR	✓	779.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	92.000	516.000
	B	195.000	0.000	83.000
	C	740.000	39.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.15	0.85
	B	0.70	0.00	0.30
	C	0.95	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.056	1.056
	B	1.042	1.000	1.020
	C	1.049	1.042	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	5.6	5.6
	B	4.2	0.0	2.0
	C	4.9	4.2	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.40	26.17	0.64	D
B-A	0.81	67.69	3.74	F
C-AB	0.09	8.54	0.10	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	62.49	61.89	0.00	482.00	0.130	0.15	8.728	A
B-A	146.81	144.11	0.00	367.14	0.400	0.67	16.631	C
C-AB	29.48	29.24	0.00	531.31	0.055	0.06	7.468	A
C-A	556.99	556.99	0.00	-	-	-	-	-
A-B	69.26	69.26	0.00	-	-	-	-	-
A-C	388.47	388.47	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	74.62	74.35	0.00	422.20	0.177	0.22	10.549	B
B-A	175.30	173.36	0.00	324.79	0.540	1.16	24.449	C
C-AB	35.33	35.27	0.00	510.54	0.069	0.08	7.892	A
C-A	664.97	664.97	0.00	-	-	-	-	-
A-B	82.71	82.71	0.00	-	-	-	-	-
A-C	463.87	463.87	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	91.38	90.07	0.00	256.24	0.357	0.55	21.930	C
B-A	214.70	205.96	0.00	265.14	0.810	3.34	56.643	F
C-AB	43.66	43.55	0.00	483.07	0.090	0.10	8.534	A
C-A	814.03	814.03	0.00	-	-	-	-	-
A-B	101.29	101.29	0.00	-	-	-	-	-
A-C	568.13	568.13	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	91.38	90.99	0.00	230.82	0.396	0.64	26.166	D
B-A	214.70	213.10	0.00	265.28	0.809	3.74	67.688	F
C-AB	43.66	43.66	0.00	483.08	0.090	0.10	8.537	A
C-A	814.03	814.03	0.00	-	-	-	-	-
A-B	101.29	101.29	0.00	-	-	-	-	-
A-C	568.13	568.13	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	74.62	76.26	0.00	407.20	0.183	0.23	11.150	B
B-A	175.30	185.11	0.00	325.50	0.539	1.29	28.323	D
C-AB	35.33	35.43	0.00	510.56	0.069	0.08	7.898	A
C-A	664.97	664.97	0.00	-	-	-	-	-
A-B	82.71	82.71	0.00	-	-	-	-	-
A-C	463.87	463.87	0.00	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	62.49	62.80	0.00	478.01	0.131	0.16	8.851	A
B-A	146.81	149.10	0.00	367.49	0.399	0.71	17.348	C
C-AB	29.48	29.55	0.00	531.32	0.055	0.06	7.479	A
C-A	556.99	556.99	0.00	-	-	-	-	-
A-B	69.26	69.26	0.00	-	-	-	-	-
A-C	388.47	388.47	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

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

Filename: A267 - Horebeech Lane Proposed Priority Junction Assessment.arc8
Path: P:\RGP\2017 Projects (3493-3600)\3547 Horebeech Lane, Horam, East Sussex\Technical Assessments\Junction Modelling
Report generation date: 30/08/2018 10:48:55

« Priority Junction Assessment - 2028 + Committed Development, PM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	Priority Junction Assessment - 2028 + Committed Development			
Stream B-C	0.30	21.68	0.24	C
Stream B-A	2.22	86.65	0.72	F
Stream C-AB	0.41	13.41	0.27	B
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2028 + Committed Development, AM" model duration: 08:00 - 09:30
"D2 - 2028 + Committed Development, PM " model duration: 08:00 - 09:30
"D3 - 2028 + Committed Development + Development, AM" model duration: 08:00 - 09:30
"D4 - 2028 + Committed Development + Development, PM" model duration: 08:00 - 09:30

Run using Junctions 8.0.4.487 at 30/08/2018 10:48:53

File summary

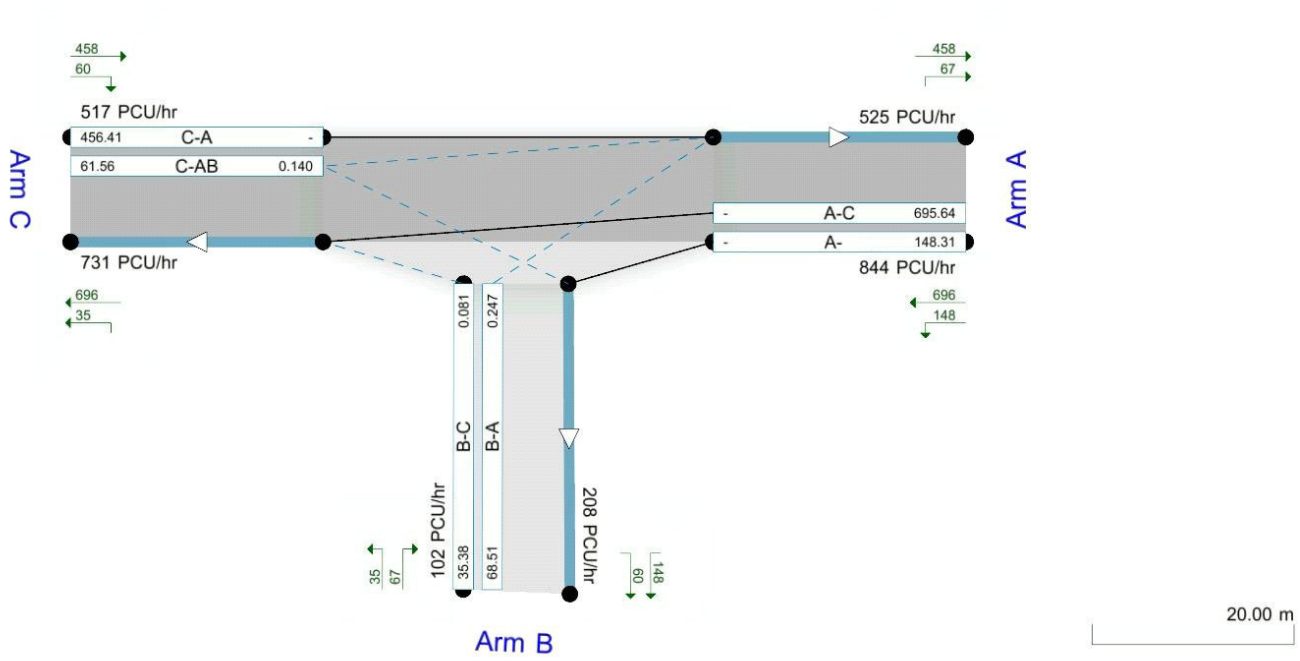
Title	A267 - Horebeech Lane Priority Junction Assessment
Location	
Site Number	
Date	29/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of ARCADY.

Priority Junction Assessment - 2028 + Committed Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Priority Junction Assessment	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 + Committed Development, PM	2028 + Committed Development	PM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	44.84	E

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A267 (N)		Major
B	B	Horebeech Lane		Minor
C	C	A267 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.09		0.00	✓	2.20	120.00	✓	2.00

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)	Lane Width (Left) (m)	Lane Width (Right) (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	One lane plus flare				10.00	6.79	4.50	4.00	4.00		2.00	21	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	575.590	0.104	0.264	0.166	0.377
1	B-C	661.420	0.101	0.255	-	-
1	C-B	643.457	0.248	0.248	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	1121.00	100.000
B	ONE HOUR	✓	138.00	100.000
C	ONE HOUR	✓	688.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	197.000	924.000
	B	91.000	0.000	47.000
	C	608.000	80.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.18	0.82
	B	0.66	0.00	0.34
	C	0.88	0.12	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.021	1.025
	B	1.015	1.000	1.000
	C	1.027	1.021	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	2.1	2.5
	B	1.5	0.0	0.0
	C	2.7	2.1	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.24	21.68	0.30	C
B-A	0.72	86.65	2.22	F
C-AB	0.27	13.41	0.41	B
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	35.38	35.04	0.00	438.74	0.081	0.09	8.910	A
B-A	68.51	67.21	0.00	277.75	0.247	0.32	17.255	C
C-AB	61.56	60.89	0.00	441.10	0.140	0.17	9.652	A
C-A	456.41	456.41	0.00	-	-	-	-	-
A-B	148.31	148.31	0.00	-	-	-	-	-
A-C	695.64	695.64	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	42.25	42.11	0.00	384.35	0.110	0.12	10.514	B
B-A	81.81	80.80	0.00	219.76	0.372	0.58	26.103	D
C-AB	75.51	75.23	0.00	408.33	0.185	0.24	11.030	B
C-A	542.99	542.99	0.00	-	-	-	-	-
A-B	177.10	177.10	0.00	-	-	-	-	-
A-C	830.66	830.66	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	51.75	51.15	0.00	238.15	0.217	0.27	19.191	C
B-A	100.19	94.49	0.00	139.45	0.719	2.00	73.925	F
C-AB	100.72	100.06	0.00	375.14	0.268	0.40	13.349	B
C-A	656.78	656.78	0.00	-	-	-	-	-
A-B	216.90	216.90	0.00	-	-	-	-	-
A-C	1017.34	1017.34	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	51.75	51.61	0.00	217.52	0.238	0.30	21.675	C
B-A	100.19	99.30	0.00	139.62	0.718	2.22	86.647	F
C-AB	100.72	100.69	0.00	375.22	0.268	0.41	13.411	B
C-A	656.78	656.78	0.00	-	-	-	-	-
A-B	216.90	216.90	0.00	-	-	-	-	-
A-C	1017.34	1017.34	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	42.25	42.96	0.00	376.19	0.112	0.13	10.826	B
B-A	81.81	88.20	0.00	220.53	0.371	0.63	28.793	D
C-AB	75.51	76.16	0.00	408.46	0.185	0.24	11.090	B
C-A	542.99	542.99	0.00	-	-	-	-	-
A-B	177.10	177.10	0.00	-	-	-	-	-
A-C	830.66	830.66	0.00	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	35.38	35.54	0.00	436.71	0.081	0.09	8.978	A
B-A	68.51	69.65	0.00	277.84	0.247	0.34	17.644	C
C-AB	61.56	61.85	0.00	441.14	0.140	0.17	9.700	A
C-A	456.41	456.41	0.00	-	-	-	-	-
A-B	148.31	148.31	0.00	-	-	-	-	-
A-C	695.64	695.64	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

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

Filename: A267 - Horebeech Lane Proposed Priority Junction Assessment.arc8
Path: P:\RGP\2017 Projects (3493-3600)\3547 Horebeech Lane, Horam, East Sussex\Technical Assessments\Junction Modelling
Report generation date: 30/08/2018 10:49:49

« Priority Junction Assessment - 2028 + Committed Development + Development, AM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	AM			
	Queue (PCU)	Delay (s)	RFC	LOS
	Priority Junction Assessment - 2028 + Committed Development + Development			
Stream B-C	1.30	48.96	0.59	E
Stream B-A	5.09	87.53	0.87	F
Stream C-AB	0.10	8.56	0.09	A
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2028 + Committed Development, AM" model duration: 08:00 - 09:30
"D2 - 2028 + Committed Development, PM" model duration: 08:00 - 09:30
"D3 - 2028 + Committed Development + Development, AM " model duration: 08:00 - 09:30
"D4 - 2028 + Committed Development + Development, PM" model duration: 08:00 - 09:30

Run using Junctions 8.0.4.487 at 30/08/2018 10:49:47

File summary

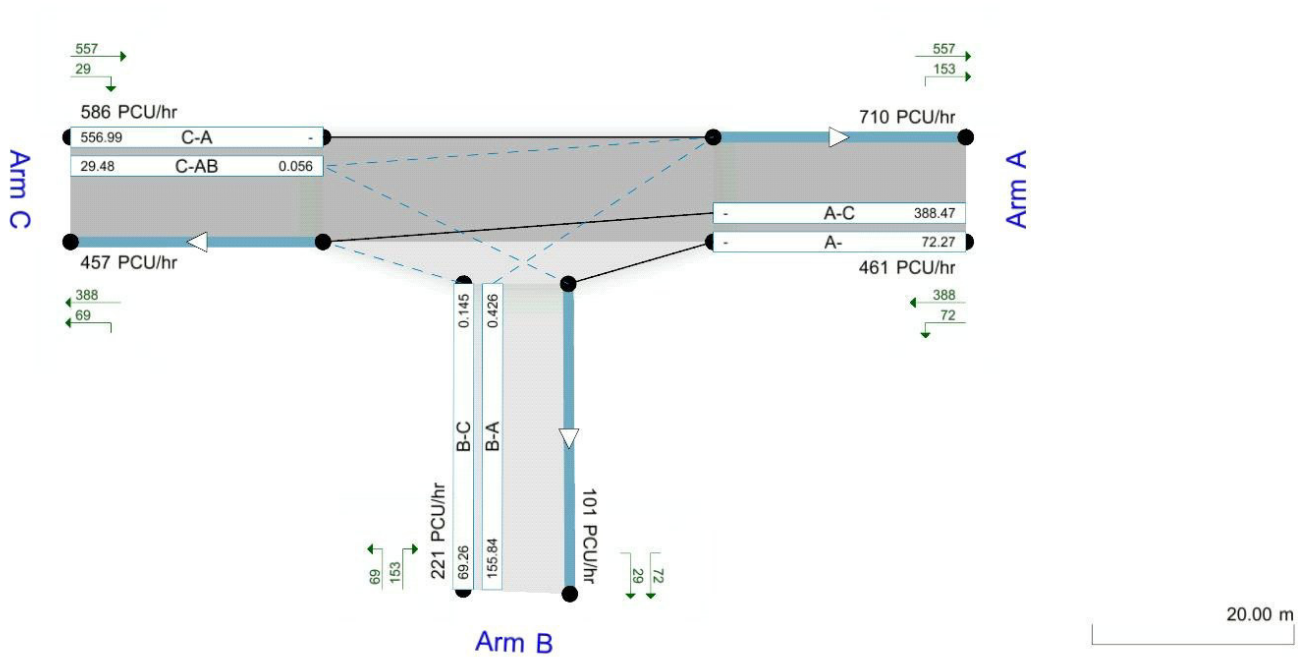
Title	A267 - Horebeech Lane Priority Junction Assessment
Location	
Site Number	
Date	29/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of ARCADY.

Priority Junction Assessment - 2028 + Committed Development + Development, AM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Priority Junction Assessment	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 + Committed Development + Development, AM	2028 + Committed Development + Development	AM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	67.85	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A267 (N)		Major
B	B	Horebeech Lane		Minor
C	C	A267 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.09		0.00	✓	2.20	120.00	✓	2.00

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)	Lane Width (Left) (m)	Lane Width (Right) (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	One lane plus flare				10.00	6.79	4.50	4.00	4.00		2.00	21	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	581.986	0.106	0.267	0.168	0.381
1	B-C	653.182	0.100	0.252	-	-
1	C-B	643.457	0.248	0.248	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	612.00	100.000
B	ONE HOUR	✓	299.00	100.000
C	ONE HOUR	✓	779.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	96.000	516.000
	B	207.000	0.000	92.000
	C	740.000	39.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.16	0.84
	B	0.69	0.00	0.31
	C	0.95	0.05	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.056	1.056
	B	1.042	1.000	1.020
	C	1.049	1.042	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	5.6	5.6
	B	4.2	0.0	2.0
	C	4.9	4.2	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.59	48.96	1.30	E
B-A	0.87	87.53	5.09	F
C-AB	0.09	8.56	0.10	A
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	69.26	68.58	0.00	477.20	0.145	0.17	8.972	A
B-A	155.84	152.85	0.00	365.59	0.426	0.75	17.403	C
C-AB	29.48	29.24	0.00	530.57	0.056	0.06	7.479	A
C-A	556.99	556.99	0.00	-	-	-	-	-
A-B	72.27	72.27	0.00	-	-	-	-	-
A-C	388.47	388.47	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	82.71	82.38	0.00	410.07	0.202	0.25	11.194	B
B-A	186.09	183.77	0.00	323.13	0.576	1.33	26.468	D
C-AB	35.33	35.27	0.00	509.65	0.069	0.08	7.907	A
C-A	664.97	664.97	0.00	-	-	-	-	-
A-B	86.30	86.30	0.00	-	-	-	-	-
A-C	463.87	463.87	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	101.29	98.84	0.00	213.02	0.476	0.87	31.531	D
B-A	227.91	215.94	0.00	262.76	0.867	4.32	67.692	F
C-AB	43.67	43.56	0.00	482.00	0.091	0.10	8.554	A
C-A	814.03	814.03	0.00	-	-	-	-	-
A-B	105.70	105.70	0.00	-	-	-	-	-
A-C	568.13	568.13	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	101.29	99.55	0.00	172.61	0.587	1.30	48.961	E
B-A	227.91	224.81	0.00	262.59	0.868	5.09	87.529	F
C-AB	43.67	43.66	0.00	482.01	0.091	0.10	8.558	A
C-A	814.03	814.03	0.00	-	-	-	-	-
A-B	105.70	105.70	0.00	-	-	-	-	-
A-C	568.13	568.13	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	82.71	86.79	0.00	386.50	0.214	0.28	12.412	B
B-A	186.09	200.42	0.00	323.53	0.575	1.51	33.389	D
C-AB	35.33	35.44	0.00	509.68	0.069	0.08	7.913	A
C-A	664.97	664.97	0.00	-	-	-	-	-
A-B	86.30	86.30	0.00	-	-	-	-	-
A-C	463.87	463.87	0.00	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	69.26	69.68	0.00	472.23	0.147	0.18	9.130	A
B-A	155.84	158.69	0.00	366.00	0.426	0.80	18.332	C
C-AB	29.48	29.55	0.00	530.57	0.056	0.06	7.487	A
C-A	556.99	556.99	0.00	-	-	-	-	-
A-B	72.27	72.27	0.00	-	-	-	-	-
A-C	388.47	388.47	0.00	-	-	-	-	-

Junctions 8

PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]
© Copyright TRL Limited, 2018

For sales and distribution information, program advice and maintenance, contact TRL:
Tel: +44 (0)1344 770758 email: software@trl.co.uk Web: http://www.trlsoftware.co.uk

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

Filename: A267 - Horebeech Lane Proposed Priority Junction Assessment.arc8
Path: P:\RGP\2017 Projects (3493-3600)\3547 Horebeech Lane, Horam, East Sussex\Technical Assessments\Junction Modelling
Report generation date: 30/08/2018 10:50:32

« Priority Junction Assessment - 2028 + Committed Development + Development, PM
» Junction Network
» Arms
» Traffic Flows
» Entry Flows
» Turning Proportions
» Vehicle Mix
» Results

Summary of junction performance

	PM			
	Queue (PCU)	Delay (s)	RFC	LOS
	Priority Junction Assessment - 2028 + Committed Development + Development			
Stream B-C	0.58	37.89	0.38	E
Stream B-A	3.20	117.62	0.81	F
Stream C-AB	0.49	13.86	0.30	B
Stream C-A	-	-	-	-
Stream A-B	-	-	-	-
Stream A-C	-	-	-	-

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

"D1 - 2028 + Committed Development, AM" model duration: 08:00 - 09:30
"D2 - 2028 + Committed Development, PM" model duration: 08:00 - 09:30
"D3 - 2028 + Committed Development + Development, AM" model duration: 08:00 - 09:30
"D4 - 2028 + Committed Development + Development, PM " model duration: 08:00 - 09:30

Run using Junctions 8.0.4.487 at 30/08/2018 10:50:30

File summary

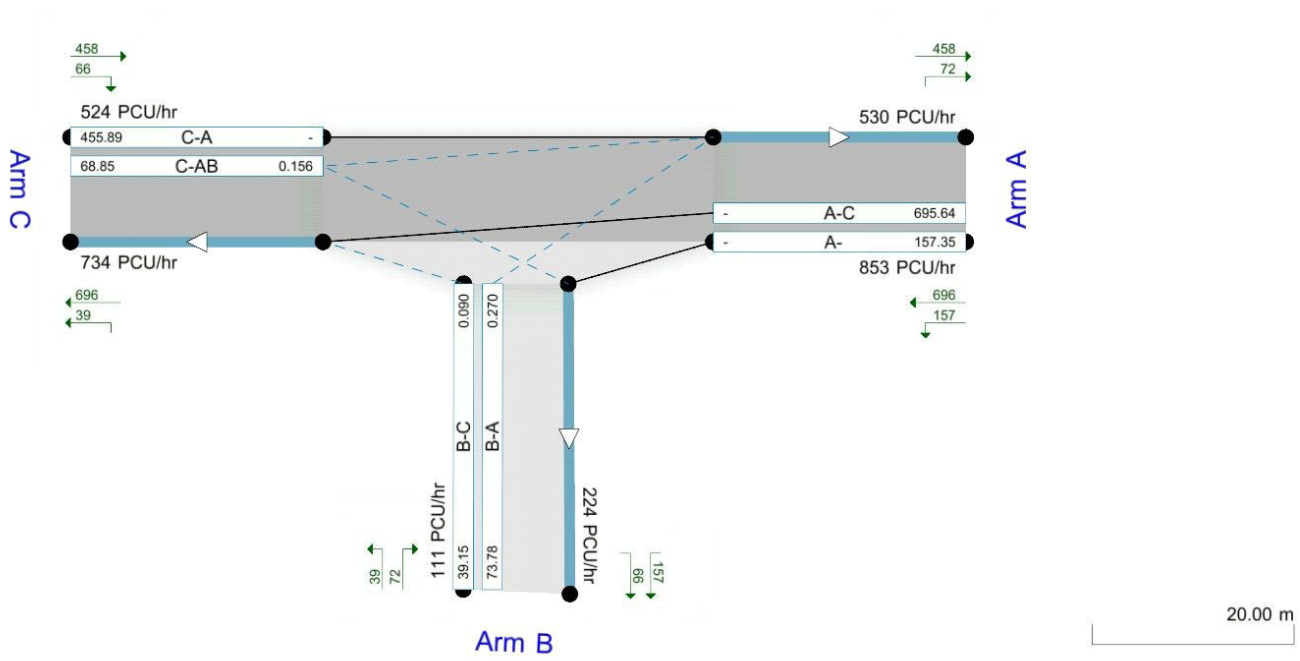
Title	A267 - Horebeech Lane Priority Junction Assessment
Location	
Site Number	
Date	29/08/2018
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	remotechi
Description	

Analysis Options

Vehicle Length (m)	Do Queue Variations	Calculate Residual Capacity	Residual Capacity Criteria Type	RFC Threshold	Average Delay Threshold (s)	Queue Threshold (PCU)
5.75			N/A	0.85	36.00	20.00

Units

Distance Units	Speed Units	Traffic Units Input	Traffic Units Results	Flow Units	Average Delay Units	Total Delay Units	Rate Of Delay Units
m	kph	PCU	PCU	perHour	s	-Min	perMin



The junction diagram reflects the last run of ARCADY.

Priority Junction Assessment - 2028 + Committed Development + Development, PM

Data Errors and Warnings

No errors or warnings

Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
Priority Junction Assessment	N/A			100.000	

Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2028 + Committed Development + Development, PM	2028 + Committed Development + Development	PM		ONE HOUR	08:00	09:30	90	15		

Junction Network

Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	T-Junction	Two-way	A,B,C	59.91	F

Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

Arms

Arms

Arm	Arm	Name	Description	Arm Type
A	A	A267 (N)		Major
B	B	Horebeech Lane		Minor
C	C	A267 (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
C	6.09		0.00	✓	2.20	120.00	✓	2.00

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)	Lane Width (Left) (m)	Lane Width (Right) (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	One lane plus flare				10.00	6.79	4.50	4.00	4.00		2.00	21	65

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
1	B-A	574.406	0.104	0.263	0.166	0.376
1	B-C	662.945	0.101	0.256	-	-
1	C-B	643.457	0.248	0.248	-	-

The slopes and intercepts shown above do NOT include any corrections or adjustments.

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

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

Traffic Flows

Demand Set Data Options

Default Vehicle Mix	Vehicle Mix Varies Over Time	Vehicle Mix Varies Over Turn	Vehicle Mix Varies Over Entry	Vehicle Mix Source	PCU Factor for a HV (PCU)	Default Turning Proportions	Estimate from entry/exit counts	Turning Proportions Vary Over Time	Turning Proportions Vary Over Turn	Turning Proportions Vary Over Entry
		✓	✓	HV Percentages	2.00				✓	✓

Entry Flows

General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	1133.00	100.000
B	ONE HOUR	✓	150.00	100.000
C	ONE HOUR	✓	697.00	100.000

Turning Proportions

Turning Counts / Proportions (PCU/hr) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.000	209.000	924.000
	B	98.000	0.000	52.000
	C	608.000	89.000	0.000

Turning Proportions (PCU) - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.00	0.18	0.82
	B	0.65	0.00	0.35
	C	0.87	0.13	0.00

Vehicle Mix

Average PCU Per Vehicle - Junction 1 (for whole period)

		To		
		A	B	C
From	A	1.000	1.021	1.025
	B	1.015	1.000	1.000
	C	1.027	1.021	1.000

Heavy Vehicle Percentages - Junction 1 (for whole period)

		To		
		A	B	C
From	A	0.0	2.1	2.5
	B	1.5	0.0	0.0
	C	2.7	2.1	0.0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-C	0.38	37.89	0.58	E
B-A	0.81	117.62	3.20	F
C-AB	0.30	13.86	0.49	B
C-A	-	-	-	-
A-B	-	-	-	-
A-C	-	-	-	-

Main Results for each time segment

Main results: (08:00-08:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	39.15	38.76	0.00	435.70	0.090	0.10	9.062	A
B-A	73.78	72.32	0.00	273.67	0.270	0.36	18.024	C
C-AB	68.85	68.09	0.00	440.63	0.156	0.19	9.849	A
C-A	455.89	455.89	0.00	-	-	-	-	-
A-B	157.35	157.35	0.00	-	-	-	-	-
A-C	695.64	695.64	0.00	-	-	-	-	-

Main results: (08:15-08:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	46.75	46.58	0.00	377.38	0.124	0.14	10.876	B
B-A	88.10	86.88	0.00	215.07	0.410	0.67	28.231	D
C-AB	85.03	84.69	0.00	409.40	0.208	0.27	11.313	B
C-A	541.56	541.56	0.00	-	-	-	-	-
A-B	187.89	187.89	0.00	-	-	-	-	-
A-C	830.66	830.66	0.00	-	-	-	-	-

Main results: (08:30-08:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	57.25	56.16	0.00	190.68	0.300	0.41	26.556	D
B-A	107.90	99.67	0.00	133.78	0.807	2.73	91.961	F
C-AB	115.82	114.98	0.00	381.43	0.304	0.48	13.777	B
C-A	651.59	651.59	0.00	-	-	-	-	-
A-B	230.11	230.11	0.00	-	-	-	-	-
A-C	1017.34	1017.34	0.00	-	-	-	-	-

Main results: (08:45-09:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	57.25	56.59	0.00	150.86	0.380	0.58	37.888	E
B-A	107.90	106.00	0.00	133.91	0.806	3.20	117.620	F
C-AB	115.82	115.79	0.00	381.52	0.304	0.49	13.863	B
C-A	651.59	651.59	0.00	-	-	-	-	-
A-B	230.11	230.11	0.00	-	-	-	-	-
A-C	1017.34	1017.34	0.00	-	-	-	-	-

Main results: (09:00-09:15)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	46.75	48.46	0.00	364.31	0.128	0.15	11.456	B
B-A	88.10	97.96	0.00	215.92	0.408	0.74	33.211	D
C-AB	85.03	85.86	0.00	409.57	0.208	0.29	11.394	B
C-A	541.56	541.56	0.00	-	-	-	-	-
A-B	187.89	187.89	0.00	-	-	-	-	-
A-C	830.66	830.66	0.00	-	-	-	-	-

Main results: (09:15-09:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-C	39.15	39.34	0.00	433.27	0.090	0.10	9.144	A
B-A	73.78	75.19	0.00	273.76	0.270	0.38	18.528	C
C-AB	68.85	69.21	0.00	440.67	0.156	0.20	9.907	A
C-A	455.89	455.89	0.00	-	-	-	-	-
A-B	157.35	157.35	0.00	-	-	-	-	-
A-C	695.64	695.64	0.00	-	-	-	-	-

APPENDIX I

EAST SUSSEX COUNTY COUNCIL CAR OWNERSHIP PARKING DEMAND TOOL

Ward 1	Horam
District	Wealden
Ward 2	Chiddingly and East Hoathly
District	Wealden
Ward 3	Hellingly
District	Wealden
Ward Tempro Factor 2011 2026	1.052
District Tempro Factor 2011-2026	1.059

STAGE 1

Please input the ward name for your development location by double clicking in the box or click box and use the drop down menu to the right of the box. The spreadsheet will automatically show the District and Ward of this location. If the ward is not known please refer to http://www.neighbourhood.statistics.gov.uk/dissemination/ and input postcode or search on Map viewer. Where Census data contains small samples for certain sized dwellings this is highlighted in red if <20, and green if <50 in the Total Demand column. In such cases, other wards should be selected to achieve a higher sample size, the tool allows for 3 wards. If there is still a low sample then the tool will automatically choose district/borough data.

East Sussex County Council

GUIDANCE NOTE

The Parking Demand Tool should be used with reference to East Sussex County Council Residential Parking Policy Guidance. The tool uses Census 2011 Car Ownership and Tempro predicted growth to 2026 to predict residential development parking demand. The tool is not a definitive standard but a guide to the expected level of car ownership. For more information please refer to the guidance document or contact developmentcontrol.transport@eastsussex.gov.uk

STAGE 2

Please input the unit type, number of bedrooms, number of units of that type and number of allocated parking spaces

DEVELOPMENT MIX						ALLOCATED PARKING	PARKING DEMAND					
Ref.	Unit Type	Tenure	Habitable Rooms (Per Unit)	Bedrooms (Per Unit)	No. of Units (Total)	Spaces (Per Unit)	Allocated No.	Unallocated for Residents		Unallocated for Visitors		Total Demand
								per unit	Total	per unit	Total	
A	Houses	Private	4	2	14	1	14	0.40	5.56	0.20	2.80	22.36
B	Houses	Private	5	3	30	2	60	0.21	6.18	0.20	6.00	72.18
C	Houses	Private	6	4	6	2	12	0.21	1.25	0.20	1.20	14.45
D	Flats	Private	2	1	8	1	8	0.14	1.14	0.20	1.60	10.74
E												
F												
G												
H												
I												
J												
K												
L												
M												
N												
O												
P												
Q												
R												
S												
Total					58		94		14.13		11.60	119.73

Total Parking Demand for Development