Technical Note 1

Project Number:	T19562
Project:	Heyford Park North
Title:	Camp Road/Chilgrove Drive Analysis
Date:	19th July 2022
Prepared By:	James Parker
Revision:	

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Background

1.1 Hub Transport Planning Ltd has been commissioned by Richborough Estates and Lone Star Land to provide transport advice for a proposed residential development on land north of Camp Road, Heyford Park.

1.2 The application is for the erection of up to 230 dwellings, creation of a new vehicular access from Camp Road and all associated works.

1.3 Following submission of the application, a response was received from Oxfordshire County Council (OCC) dated 20th May 2022, within which the Rights of Way team made the following comment:

"The County is concerned about the timing of this application and the reliance that is placed on the larger airbase extension application and the associated works to create a staggered signalised junction, including safe NMU crossing and works to Chilgrove Drive. That application and new Chilgrove Drive access works should be complete before this site is occupied."

1.4 Our view is that the above requirement is not necessary for the proposed development to proceed and, as such, we entered into discussions with OCC in June 2022, with a view to demonstrating that the existing junction arrangement is more than capable of accommodating the proposed development without a material detrimental impact on its operation (and thus also on NMUs).

1.5 OCC requested that we test the junction in its current form as a priority-controlled T-junction, but with appropriate traffic growth and committed development traffic flows.

1.6 On the basis of the above, we have set out below the traffic flows and junction analysis.

Traffic Flows

1.7 In terms of the traffic flows, the starting point for the assessment of the junction is the Bicester Transport Model (BTM) which incorporated both 2031 'Reference Case' and 2031 'With Development' scenarios.

1.8 These were provided within the Transport Assessment (TA) report supporting the application, within Appendix A of that document, and summarised in Figures 3.1, 3.2, 3.5 and 3.6 of the report.

1.9 We have extracted the flows from those figures for the Camp Road/Chilgrove Drive junction and these are provided as **Figures 1 to 4** in this note.

1.10 As agreed with OCC, we have entered the traffic flows into the Junctions 10 PICADY model without the future flows to/from Chilgrove Drive, on the basis that the developments intended to be served by Chilgrove Drive

(which is currently stopped-up at the northern end and carries negligible traffic flow throughout the week) will not be occupied until the staggered signalised junction is in place.

1.11 However, OCC also mentioned that the junction will attract some trips associated with other parts of Heyford Park and thus simply removing all of the trips to/from the Chilgrove Drive arm would likely underestimate the future traffic flow through the junction prior to the upgrade being delivered.

1.12 Therefore, we have also provided a sensitivity test as part of our junction analysis, within which we have increased all of the traffic turning movements through the junction by 100% for the 2031 'With Development' scenario; we consider this to be an extremely robust assessment of the junction prior to the implementation of the staggered signals scheme arrangement with Chilgrove Drive.

Junction Analysis

1.13 The priority T-junction has been assessed using the PICADY module of the Junctions 10 software; it should be noted that all of the junction analysis uses the 'One Hour' demand profile to provide the most robust assessment of the junction.

1.14 The junction analysis for the 2031 'Reference Case' and 2031 'With Development' scenarios is provided as **Appendix A** to this note and a summary of the results is provided in **Table 1** below.

Table 1 – Camp Road/Chilgrove Drive/Unnamed Road – PICADY Analysis

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
2031 'Reference Case'						
Unnamed Rd	0.14	0	7	0.14	0	7
Camp Rd (S) RT	0.07	0	6	0.03	0	5
2031 'With Development'						
Unnamed Rd	0.16	0	8	0.18	0	7
Camp Rd (S) RT	0.07	0	7	0.03	0	5

1.15 Table 1 above demonstrates that the existing junction is forecast to operate with negligible queues and delays in both the 2031 'Reference Case' and 2031 'With Development' scenarios.

1.16 As stated above, we have also undertaken an extremely robust 'With Development' sensitivity test, within which we have increased all of the traffic turning movements through the junction by 100%.

1.17 The sensitivity test analysis is provided as **Appendix B** to this note and a summary of the results is provided in **Table 2** below.

Table 2 – Camp Road/Chilgrove Drive/Unnamed Road – Sensitivity Analysis

Approach	AM Peak 08:00-09:00			PM Peak 17:00-18:00		
	RFC	Queue	Delay (s)	RFC	Queue	Delay (s)
2031 'With Development' (+100% flows)						
Unnamed Rd	0.42	1	15	0.41	1	12
Camp Rd (S) RT	0.25	1	8	0.08	0	5

1.18 Table 2 above demonstrates that even under an extremely robust sensitivity test scenario, the existing junction layout can accommodate the traffic movements with minimal queues and delays to traffic.

1.19 It is worth highlighting that OCC data demonstrates that there have been no recorded injury accidents at this junction in the latest five-year period, as set out in the TA report.

1.20 Further investigation of the accident record at the junction, using the Crashmap website, indicates that in the last 23 years there have been only five recorded injury accidents, all of which were 'slight' in terms of severity.

1.21 Those were a single vehicle accident in October 2001, and a further four accidents involving two vehicles in August 2004, March 2006, November 2006 and March 2014.

1.22 None of the accidents involved a pedestrian or cyclist.

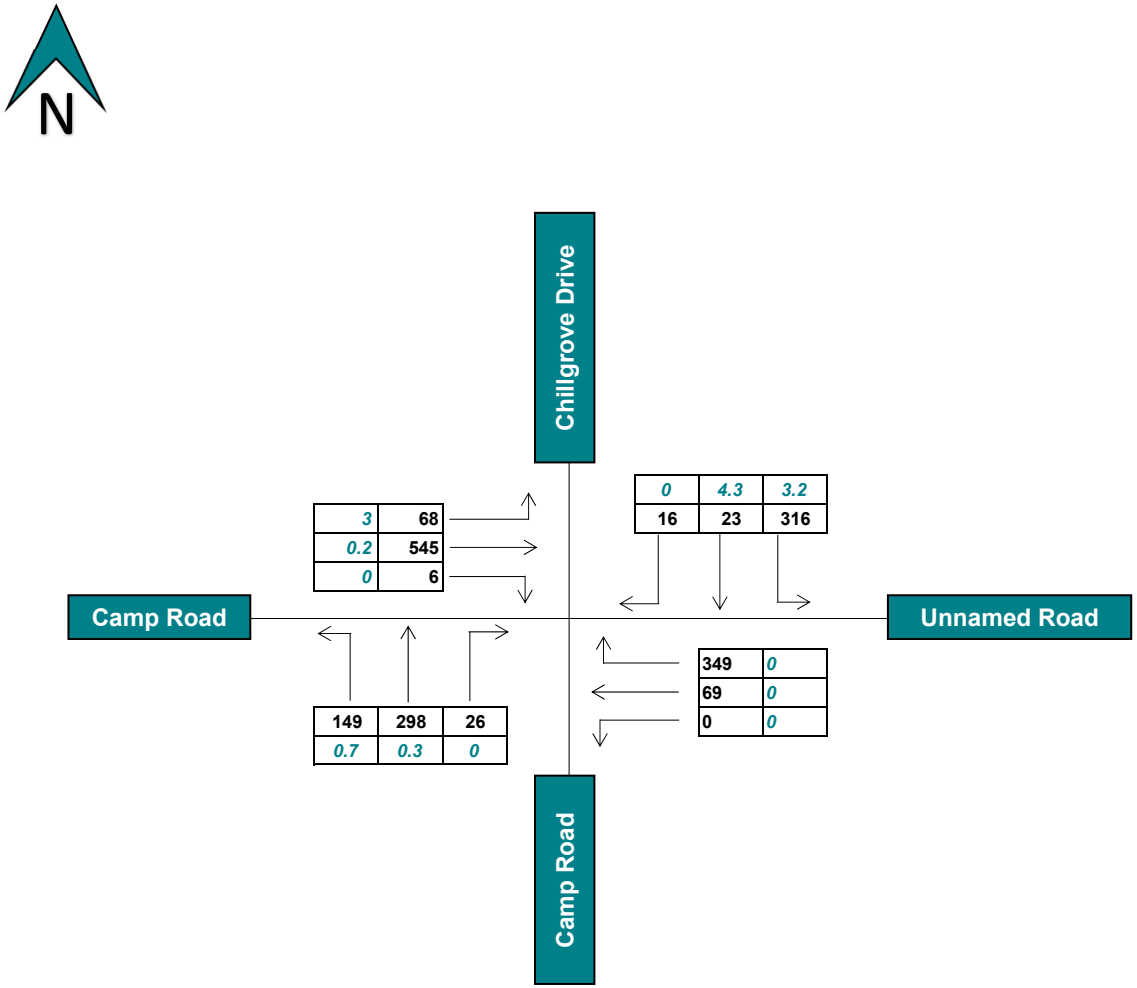
Summary and Conclusion

1.23 The assessment work undertaken and detailed in this note demonstrates that the existing junction of Camp Road and Chilgrove Drive/Unnamed Road will operate with significant spare capacity prior to the proposed upgrade to a staggered signals layout.

1.24 This is also the case even when the traffic flows through the junction are increased by 100% to provide an extremely robust sensitivity test.

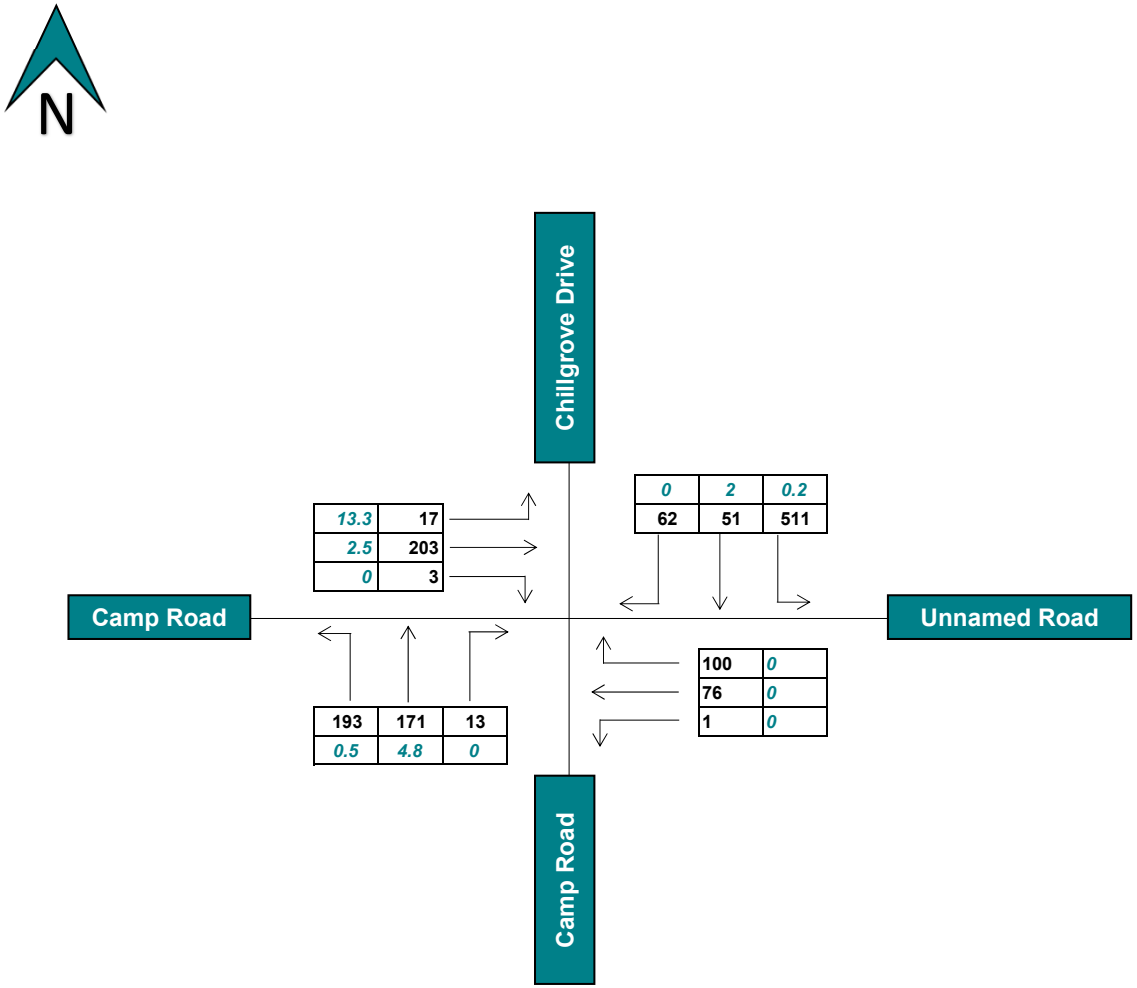
1.25 On the basis of the above, it is clear that the proposed development will not have a material impact on the operation of the junction in its current form; in turn, NMUs will retain the ability to use the PRoW network adjacent to the junction both safely and conveniently, prior to the new staggered signalised junction being implemented.

Figures



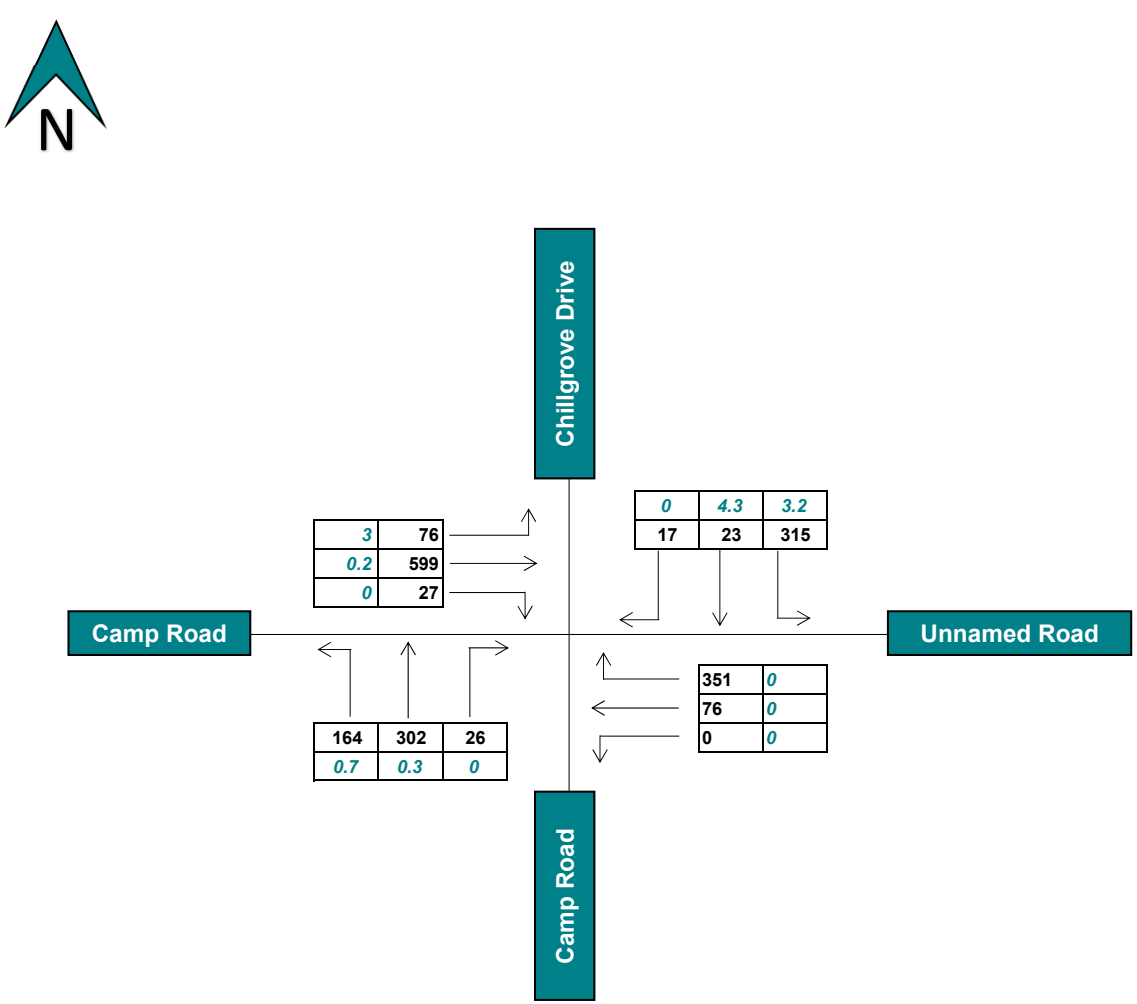
123	PCUs
123	HGV %

hub TRANSPORT PLANNING LTD	**T19562** **Camp Road, Heyford Park**
	Figure 1 2031 Reference Case - taken from TA Fig 3.1 AM Peak Hour: 08:00 - 09:00



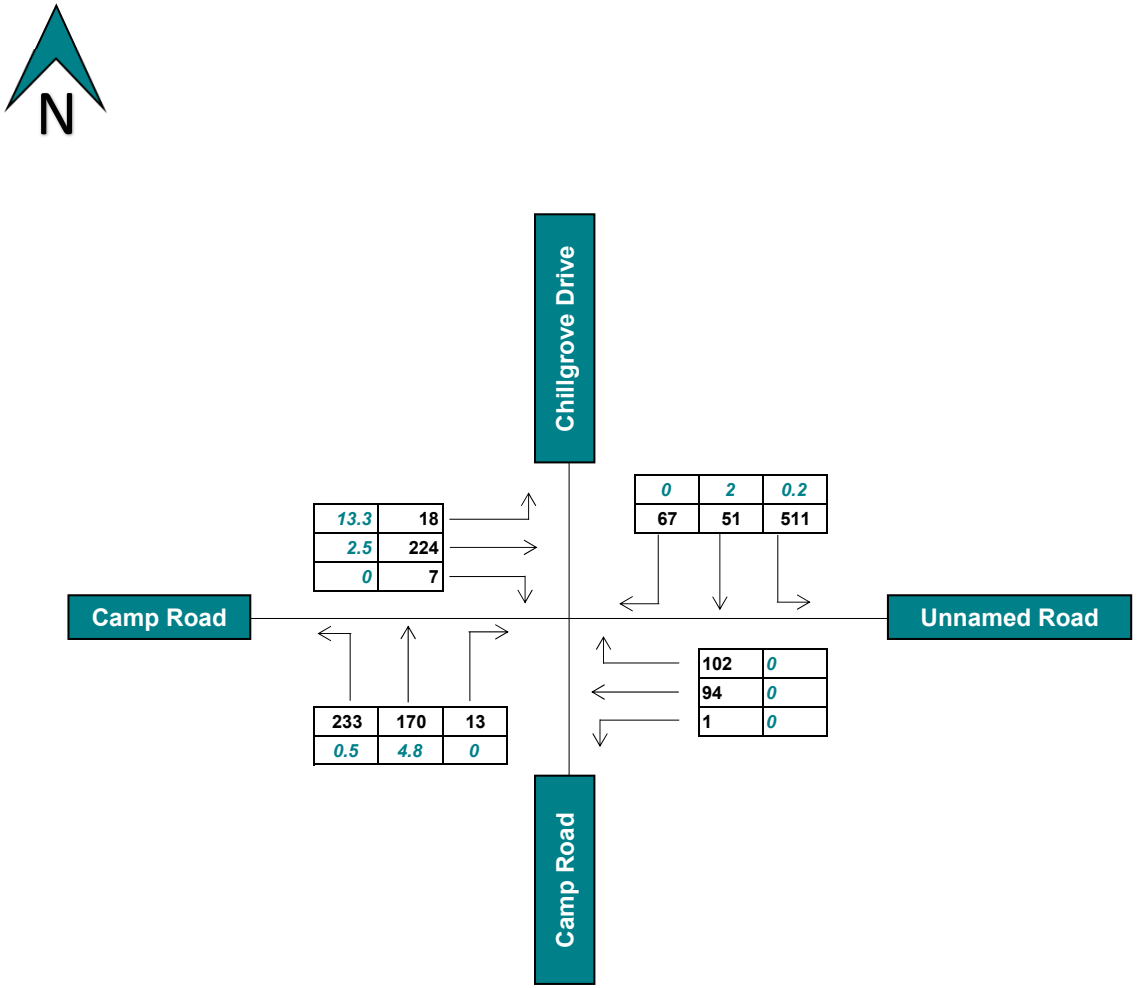
123	PCUs
123	HGV %

hub TRANSPORT PLANNING LTD	**T19562** **Camp Road, Heyford Park**
	Figure 2 2031 Reference Case - taken from TA Fig 3.2 PM Peak Hour: 17:00 - 18:00



123	PCUs
123	HGV %

hub TRANSPORT PLANNING LTD	**T19562** **Camp Road, Heyford Park**
	Figure 3 2031 with Development - taken from TA Fig 3.5 AM Peak Hour: 08:00 - 09:00



123	PCUs
123	HGV %

hub TRANSPORT PLANNING LTD	**T19562** **Camp Road, Heyford Park**
	Figure 4 2031 with Development - taken from TA Fig 3.6 PM Peak Hour: 17:00 - 18:00

Appendix A

Junctions 10 Picady Output – 2031 Assessments

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.2.1574
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Filename: T19562 - Camp Rd-Chilgrove Drive Priority.j10
Path: C:\Users\JamesParker\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2019\T19562 Heyford Park\Junction Assessments\Picady
Report generation date: 18/07/2022 17:31:16

»2031 Ref Case, AM
»2031 Ref Case, PM
»2031 with Dev, AM
»2031 with Dev, PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity
	2031 Ref Case													
Stream B-C	D1	0.0	0.00	0.00	A	0.92	193 % [Stream B-A]	D2	0.0	5.00	0.00	A	1.28	262 % [Stream B-A]
Stream B-A		0.2	7.49	0.14	A				0.2	6.96	0.14	A		
Stream C-AB		0.1	6.43	0.07	A				0.0	5.36	0.03	A		
	2031 with Dev													
Stream B-C	D3	0.0	0.00	0.00	A	0.93	160 % [Stream B-A]	D4	0.0	5.09	0.00	A	1.40	201 % [Stream B-A]
Stream B-A		0.2	7.90	0.16	A				0.2	7.43	0.18	A		
Stream C-AB		0.1	6.53	0.07	A				0.0	5.25	0.03	A		

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

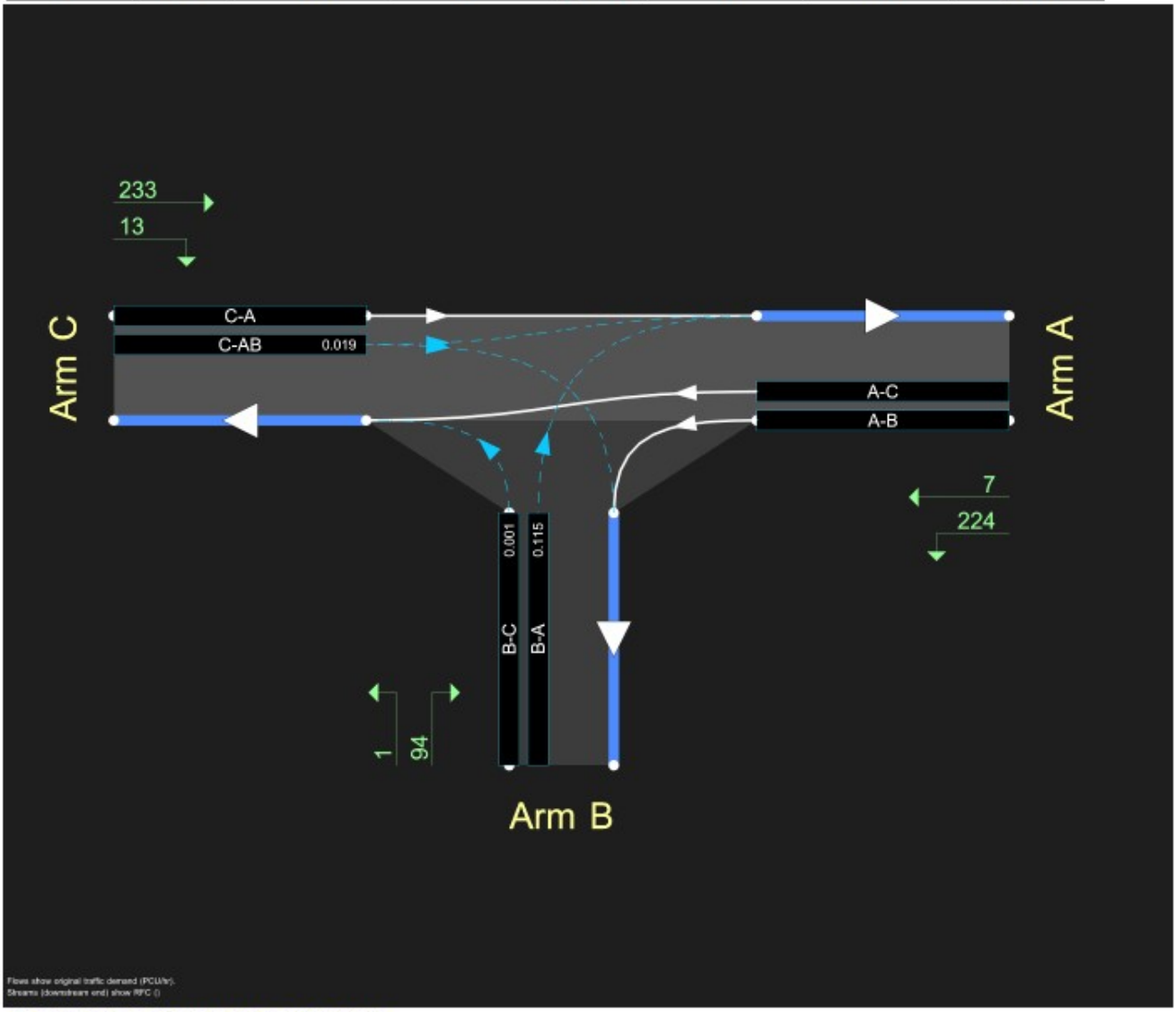
File summary

File Description

Title	Camp Road/Chilgrove Drive Priority
Location	Heyford Park
Site number	
Date	18/07/2022
Version	
Status	(new file)
Identifier	
Client	Richborough Estates
Jobnumber	T19562
Enumerator	James Parker
Description	

Units

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



The junction diagram reflects the last run of Junctions.

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031 Ref Case	AM	ONE HOUR	07:45	09:15	15	✓
D2	2031 Ref Case	PM	ONE HOUR	16:45	18:15	15	✓
D3	2031 with Dev	AM	ONE HOUR	07:45	09:15	15	✓
D4	2031 with Dev	PM	ONE HOUR	16:45	18:15	15	✓

Analysis Set Details

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

2031 Ref Case, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		0.92	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	193	Stream B-A	0.92	A

Arms

Arms

Arm	Name	Description	Arm type
A	Camp Road (W)		Major
B	Unnamed Road (E)		Minor
C	Camp Road (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.20			90.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	5.90	4.00	3.40	3.10	✓	1.00	30	249

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	677	0.122	0.309	0.194	0.441
B-C	777	0.118	0.298	-	-
C-B	628	0.240	0.240	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D1	2031 Ref Case	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	551	100.000
B		ONE HOUR	✓	69	100.000
C		ONE HOUR	✓	175	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	545	6
	B	69	0	0
	C	149	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.14	7.49	0.2	A	63	95
C-AB	0.07	6.43	0.1	A	31	47
C-A					129	194
A-B					500	750
A-C					6	8

2031 Ref Case, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		1.28	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	262	Stream B-A	1.28	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D2	2031 Ref Case	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	206	100.000
B		ONE HOUR	✓	77	100.000
C		ONE HOUR	✓	206	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	203	3
	B	76	0	1
	C	193	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	0
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.00	5.00	0.0	A	0.92	1
B-A	0.14	6.96	0.2	A	70	105
C-AB	0.03	5.36	0.0	A	16	24
C-A					173	259
A-B					186	279
A-C					3	4

2031 with Dev, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		0.93	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	160	Stream B-A	0.93	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D3	2031 with Dev	AM	ONE HOUR	07:45	09:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	626	100.000
B		ONE HOUR	✓	76	100.000
C		ONE HOUR	✓	190	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	599	27
	B	76	0	0
	C	164	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.16	7.90	0.2	A	70	105
C-AB	0.07	6.53	0.1	A	32	49
C-A					142	213
A-B					550	824
A-C					25	37

2031 with Dev, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		1.40	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	201	Stream B-A	1.40	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically
D4	2031 with Dev	PM	ONE HOUR	16:45	18:15	15	✓

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	231	100.000
B		ONE HOUR	✓	95	100.000
C		ONE HOUR	✓	246	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	224	7
	B	94	0	1
	C	233	13	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	0
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.00	5.09	0.0	A	0.92	1
B-A	0.18	7.43	0.2	A	86	129
C-AB	0.03	5.25	0.0	A	17	26
C-A					209	313
A-B					206	308
A-C					6	10

Appendix B

Junctions 10 Picady Output – Sensitivity Assessment

Junctions 10

PICADY 10 - Priority Intersection Module

Version: 10.0.2.1574
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Filename: T19562 - Camp Rd-Chilgrove Drive Priority - Sensitivity Test.j10
Path: C:\Users\JamesParker\Hub Transport Planning Ltd\Hub Transport Planning - General\Projects\2019\T19562 Heyford Park\Junction Assessments\Picady
Report generation date: 19/07/2022 13:27:18

»2031 with Dev + 100%, AM
»2031 with Dev + 100%, PM

Summary of junction performance

	AM							PM						
	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity	Set ID	Queue (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Network Residual Capacity
	2031 with Dev + 100%													
Stream B-C	D5	0.0	0.00	0.00	A	1.82	30 % [Stream B-A]	D6	0.0	6.10	0.00	A	2.27	50 % [Stream B-A]
Stream B-A		0.7	15.39	0.42	C				0.7	12.31	0.41	B		
Stream C-AB		0.7	8.08	0.25	A				0.1	4.83	0.08	A		

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Junction LOS and Junction Delay are demand-weighted averages. Network Residual Capacity indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

File summary

File Description

Title	Camp Road/Chilgrove Drive Priority
Location	Heyford Park
Site number	
Date	18/07/2022
Version	
Status	(new file)
Identifier	
Client	Richborough Estates
Jobnumber	T19562
Enumerator	James Parker
Description	

Units

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

Analysis Options

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

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D3	2031 with Dev	AM	ONE HOUR	07:45	09:15	15			
D4	2031 with Dev	PM	ONE HOUR	16:45	18:15	15			
D5	2031 with Dev + 100%	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3 * 2.0
D6	2031 with Dev + 100%	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4 * 2.0

Analysis Set Details

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

2031 with Dev + 100%, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		1.82	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	30	Stream B-A	1.82	A

Arms

Arms

Arm	Name	Description	Arm type
A	Camp Road (W)		Major
B	Unnamed Road (E)		Minor
C	Camp Road (S)		Major

Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Has right-turn storage	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
C	6.20			90.0	✓	0.00

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

Minor Arm Geometry

Arm	Minor arm type	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate flare length	Flare length (PCU)	Visibility to left (m)	Visibility to right (m)
B	One lane plus flare	10.00	5.90	4.00	3.40	3.10	✓	1.00	30	249

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for C-A	Slope for C-B
B-A	677	0.122	0.309	0.194	0.441
B-C	777	0.118	0.298	-	-
C-B	626	0.240	0.240	-	-

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

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

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

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D5	2031 with Dev + 100%	AM	ONE HOUR	07:45	09:15	15	✓	Simple	D3 * 2.0

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	1252	100.000
B		ONE HOUR	✓	152	100.000
C		ONE HOUR	✓	380	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	1198	54
	B	152	0	0
	C	328	52	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	1	0
	B	0	0	0
	C	1	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.00	0.00	0.0	A	0	0
B-A	0.42	15.39	0.7	C	139	209
C-AB	0.25	8.08	0.7	A	103	154
C-A					246	369
A-B					1099	1649
A-C					50	74

2031 with Dev + 100%, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction type	Arm A Direction	Arm B Direction	Arm C Direction	Use circulating lanes	Junction Delay (s)	Junction LOS
1	Camp Road/Chilgrove	T-Junction	Two-way	Two-way	Two-way		2.27	A

Junction Network

Driving side	Lighting	Network residual capacity (%)	First arm reaching threshold	Network delay (s)	Network LOS
Left	Normal/unknown	50	Stream B-A	2.27	A

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)	Run automatically	Relationship type	Relationship
D6	2031 with Dev + 100%	PM	ONE HOUR	16:45	18:15	15	✓	Simple	D4 * 2.0

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

Demand overview (Traffic)

Arm	Linked arm	Profile type	Use O-D data	Average Demand (PCU/hr)	Scaling Factor (%)
A		ONE HOUR	✓	462	100.000
B		ONE HOUR	✓	190	100.000
C		ONE HOUR	✓	492	100.000

Origin-Destination Data

Demand (PCU/hr)

		To		
		A	B	C
From	A	0	448	14
	B	188	0	2
	C	466	26	0

Vehicle Mix

Heavy Vehicle Percentages

		To		
		A	B	C
From	A	0	3	0
	B	0	0	0
	C	2	0	0

Results

Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS	Average Demand (PCU/hr)	Total Junction Arrivals (PCU)
B-C	0.00	6.10	0.0	A	2	3
B-A	0.41	12.31	0.7	B	173	259
C-AB	0.08	4.83	0.1	A	51	76
C-A					400	601
A-B					411	617
A-C					13	19