



Fressingfield Cumulative Traffic Assessment

Date: 17 October 2017
File Ref: MA/P16 - 1151
Subject: Fressingfield Cumulative Traffic Assessment

1.0 INTRODUCTION

- 1.1 Create Consulting Engineers Ltd has been instructed to undertake transport submissions for two proposed residential development schemes of 99 dwellings off John Shepherd Rd and 85 dwellings off Stradbroke Rd, Fressingfield, Suffolk.
- 1.2 Comprehensive transport reports have been prepared by Create Consulting Engineers in support of the respective planning applications (1432/17 and 1449/17) submitted to Mid-Suffolk District Council.
- 1.3 In response to the aforementioned planning applications, Suffolk County Council (SCC) as Highway Authority have requested further assessment to review the combined impact of the aforementioned residential schemes on certain junctions on the network in combination with other identified schemes, as follows:
- 1648/17 (Post Mill Lane) – 24 dwellings;
 - 3872/16 (Land off School Lane) – 18 dwellings;
 - 4410/16 (Red House Farm) – 28 dwellings.
- 1.4 While it is noted that the Land off School Lane and Red House Farm schemes include other land use components (e.g. Church, Scout Hut), these land uses are not considered to be traffic intensive during the AM and PM peak hour periods on the local highway network. Therefore, only their residential components are considered and the combined number of dwellings included in this cumulative assessment is 254 units.
- 1.5 Following correspondence with SCC Highways, the junctions identified for cumulative assessment are presented as follows:

- B1116/C515 Stradbroke Rd/C508 New St “twin” T-junction;
- B1123/B1116/”Wingfield” staggered crossroads;
- B1116/C504 Low Rd (Cratfield Rd) T-junction.

1.6 In addition to the aforementioned traffic assessment, SCC Highways has also requested that an audit of footways (existing and proposed) is undertaken relevant to the schemes at Fressingfield and is also covered in this Technical Note.

Capacity Assessment

1.7 A series of AM (0730 – 0930) and PM (1630 – 1830) manual classified turning count surveys with queue length observations were undertaken at the aforementioned junctions on Thursday 28 September 2017 to capture typical mid-week conditions on the local network, during school term time. Results are included in full as *Enclosure 1* with this Technical Note. The queue length observations obtained as part of the survey work indicate that none of the existing junctions identified above are currently subject to any particular capacity issues.

1.8 A suite of traffic flow diagrams has been produced summarising the results of the traffic surveys with background traffic then factored to a future year of 2022, based on the appropriate growth rates extracted from TEMPRO. Full copies of traffic flow diagrams are included as *Enclosure 2* at the back of this Technical Note.

1.9 Trip rates for AM and PM peak hour traffic generation arising from *all* of the proposed developments identified above are based on those TRICS-based rates included in the transport submissions for the John Shepherd Rd and Stradbroke Rd schemes (below). However, for the purposes of this cumulative assessment work, these trip rates have been increased by 25% for added robustness.

Land Use	AM Peak		PM Peak	
	Arr.	Dep.	Arr.	Dep.
Private Units (Rate)	0.143	0.376	0.332	0.193

Table 1.1: Vehicular Trip Rates (increased by 25% in PICADY modelling)

1.10 The trip rates extracted from the TRICS database (and then increased by a further 25%) are for private housing only. In reality, the proposed developments at Fressingfield would include a proportion of affordable housing, which is typically less traffic-intensive during the AM and PM peak hour periods. However, this is not accounted for as part of this analysis in order to offer a “worse-case” forecast of trip generation.

1.11 The development-generated traffic for all five schemes has been distributed onto the network in respect of existing traffic patterns at the aforementioned junctions, also bearing in mind directional data from ATC surveys on New St and Stradbroke Rd undertaken in conjunction with planning applications 4410/16 and 1449/17.

- 1.12 The suite of traffic flow diagrams (see *Enclosure 2*) has been produced summarising the results of the traffic surveys with background traffic then factored to a future year of 2022, based on the appropriate growth rates extracted from TEMPRO and then loaded with the additional AM and PM peak hour traffic demands forecast for the total of 254 dwellings.
- 1.13 In addition to application of worse-case trip generation forecasts, the application of TEMPRO growth factors will introduce an element of double-counting. Therefore, the additional traffic loadings allowed for in the 2022 + Development scenarios must be considered robust.
- 1.14 PICADY (Priority Intersection Capacity and Delay) is a programme for modelling three and four arm priority junctions. This programme is based on empirical relationships which link capacity and safety with various geometric junction parameters such as road widths and visibilities. Results from the modelling process are expressed in queue lengths and delay offering a measure of theoretical junction performance.
- 1.15 The cumulative traffic flows for 2022 plus development-generated traffic have then been loaded into the PICADY computer programme for each junction (with the New St and Stradbroke Rd junctions being modelled as linked).
- 1.16 Geometric parameters (*Enclosure 3*) for the junctions have been based on OS mapping, cross-checked with on-site observations.



Photo 1: B1116/C515 Stradbroke Rd/C508 New St “twin” T-junction



Photo 2: B1123/B1116/"Wingfield" staggered crossroads



Photo 3: B1116/C504 Low Rd (Cratfield Rd) T-junction

- 1.17 The results of the PICADY modelling work (summarised below) are presented in full with this Technical Note as *Enclosure 4* and demonstrate that all junctions would continue to work well within capacity with the introduction of all 254 dwellings. While the impact of the developments in combination would be significant in percentage terms, all junctions identified would continue to have significant amounts of reserve capacity. With the introduction of all schemes and with surveyed traffic factored up to 2022, queuing and delays at these junctions would remain minimal.

	AM							PM						
	Q (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap	Q (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap
[Lane Simulation] - 2022														
Junction 1-2 - Arm A	0.0	0.00		A	2.74	A	%	0.0	0.00		A	2.64	A	%
Junction 1-2 - Arm B	0.3	9.34		A				0.2	9.21		A			
Junction 1-2 - Arm C	0.1	2.75		A				0.1	2.63		A			
Junction 2-2 - Arm A	0.0	0.00		A	5.70	A	[]	0.0	0.00		A	4.52	A	[]
Junction 2-2 - Arm B	0.3	8.86		A				0.3	7.73		A			
Junction 2-2 - Arm C	0.4	5.66		A				0.3	5.25		A			

Table 1.2: B1116/C515 Stradbroke Rd/C508 New St “twin” T-junction PICADY results

	AM							PM						
	Q (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap	Q (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap
2022														
Junction 1-2 - Stream B-ACD	0.2	9.90	0.16	A	1.75	A	185 %	0.3	11.14	0.21	B	1.99	A	123 %
Junction 1-2 - Stream A-BCD	0.1	5.51	0.04	A				0.1	5.26	0.06	A			
Junction 1-2 - Stream D-ABC	0.0	6.53	0.03	A				0.1	7.05	0.05	A			
Junction 1-2 - Stream C-ABD	0.0	0.00	0.00	A	1.15	A	[Junction 1-2 - Stream B-ACD]	0.0	0.00	0.00	A	1.06	A	[Junction 1-2 - Stream B-ACD]
Junction 2-2 - Stream B-AC	0.1	7.58	0.10	A				0.1	7.57	0.07	A			
Junction 2-2 - Stream C-AB	0.0	5.83	0.02	A				0.1	5.91	0.05	A			

Table 1.3: B1123/B1116/“Wingfield” staggered crossroads & B1116/C504 Low Rd (Cratfield Rd) T-junction & PICADY results

Safety Assessment

- 1.18 A safety review of the aforementioned junctions has been carried out using the Crashmap resource, reviewing the latest data available for the five years to end of 2016. While it is noted that more up-to-date information may now be available, a review period covering the five years between 2011 and 2016 is considered a reasonable basis upon which to draw conclusions relevant to the proposed developments at Fressingfield.
- 1.19 While the five schemes would unavoidably lead to some increased accident risk, simply on account of there being more traffic, pedestrians and cyclists on the network, there are no recorded accidents at any of the junctions considered in the cumulative assessment during the 2011 to 2016 period, nor any sign of prevailing road safety issues on the local road network as a whole. Given the lack of accidents over this extended timeframe, it is reasonable to assert that the increases in traffic, pedestrians and cyclists on the network brought about by the proposed developments should not give rise to any significant causes for concern from a road safety perspective.
- 1.20 Outputs from Crashmap are included with this report as *Enclosure 5*.

Footway Provision

- 1.21 Following the request from SCC Highways, a graphical audit of the existing and proposed footways has been undertaken and is included as *Enclosure 6* of this Technical Note. It is acknowledged that the proposed developments will introduce significant levels of additional pedestrian and vehicular movements and there are areas in the village where footways are not currently installed.

- 1.22 These sections effectively operate as shared space and the lack of accidents on the network suggests that pedestrians are not being put in situations of undue risk. It is considered, therefore, that there are no underlying safety issues on the local road network that should prevent the proposals coming forward.
- 1.23 Where footways are not currently provided, or being proposed there may be advantage in installing new “pedestrians in road ahead” warning signs to better highlight the presence of pedestrian movements. For example, such signing might usefully be provided on New St between Carpenters Yard and the junction with Priory Crescent.
- 1.24 We also note, that of the five proposals identified only the John Shepherd Rd, Stradbroke Rd and the Land off School Lane schemes would have continuous footway links to/from their nearest bus stops, which should be considered advantageous.
- 1.25 A Footway Provision Plan showing all five development proposals and local services and facilities is included with this report as *Enclosure 6*.

TECHNICAL NOTE SUMMARY

- This Technical Note builds on information already submitted in connection with a series of development proposals in Fressingfield, including a total of approximately 254 dwellings.
- The findings of this Technical Note support the assertion that there are no identified safety or capacity issues that should prevent any, or all of the proposed developments in Fressingfield from coming forward.

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Reference: MA/P16 – 1151 Fressingfield Cumulative Traffic Assessment

Enclosures: (1) Traffic Survey Results;
(2) Traffic Flow Diagrams;
(3) Junction Geometry Plans;
(4) PICADY Outputs;
(5) Accident Data;
(6) Footway Provision Plan.

ENCLOSURE 1



Fressingfield - Manual Traffic Survey, Thursday 28th September 2017

Junction: (2) B1116 / Stradbroke Road / New Street

Approach: B1116 (North)

TIME	Left to B1116 (East)								Ahead to Stradbroke Road								Right to New Street							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	10	3	0	0	1	14	0	0	5	0	1	0	0	6	0	0	3	1	0	0	0	4
0745 - 0800	0	0	14	2	0	1	0	17	0	0	7	3	1	1	0	12	0	0	10	1	0	0	1	12
Hourly Total	0	0	24	5	0	1	1	31	0	0	12	3	2	1	0	18	0	0	13	2	0	0	1	16
0800 - 0815	0	0	7	2	0	0	0	9	0	0	9	2	0	0	0	11	0	0	5	1	0	0	0	6
0815 - 0830	0	0	15	0	0	0	0	15	0	0	17	0	0	0	2	19	0	0	7	2	0	0	0	9
0830 - 0845	0	0	15	3	1	0	0	19	0	0	20	2	0	0	0	22	0	0	10	0	1	0	0	11
0845 - 0900	0	0	9	3	0	0	0	12	0	0	10	3	0	1	0	14	0	0	11	0	1	0	0	12
Hourly Total	0	0	46	8	1	0	0	55	0	0	56	7	0	1	2	66	0	0	33	3	2	0	0	38
0900 - 0915	0	0	5	0	0	1	0	6	0	0	3	1	0	0	0	4	0	0	7	0	0	0	0	7
0915 - 0930	0	0	6	0	0	1	0	7	0	0	4	1	0	1	0	6	0	0	3	2	0	0	0	5
Hourly Total	0	0	11	0	0	2	0	13	0	0	7	2	0	1	0	10	0	0	10	2	0	0	0	12
Session Total	0	0	81	13	1	3	1	99	0	0	75	12	2	3	2	94	0	0	56	7	2	0	1	66
1630 - 1645	0	0	6	1	0	0	0	7	0	0	7	0	0	1	1	9	0	0	6	2	0	0	0	8
1645 - 1700	0	0	9	0	0	0	0	9	0	0	7	0	0	0	0	7	1	0	7	3	0	0	0	11
Hourly Total	0	0	15	1	0	0	0	16	0	0	14	0	0	1	1	16	1	0	13	5	0	0	0	19
1700 - 1715	0	0	15	2	0	0	0	17	0	0	9	7	0	0	0	16	0	0	4	1	0	0	0	5
1715 - 1730	0	0	8	1	0	0	0	9	0	1	18	3	0	0	0	22	0	0	9	2	0	0	0	11
1730 - 1745	0	1	8	3	0	0	0	12	0	0	12	3	0	0	0	15	0	0	5	1	0	0	0	6
1745 - 1800	0	1	4	0	0	0	0	5	0	0	4	0	0	0	0	4	0	0	6	2	0	0	0	8
Hourly Total	0	2	35	6	0	0	0	43	0	1	43	13	0	0	0	57	0	0	24	6	0	0	0	30
1800 - 1815	0	0	9	0	0	0	0	9	0	0	3	0	0	0	0	3	0	0	10	2	0	0	0	12
1815 - 1830	0	0	10	0	0	0	0	10	0	0	5	1	0	0	0	6	1	0	7	1	0	0	0	9
Hourly Total	0	0	19	0	0	0	0	19	0	0	8	1	0	0	0	9	1	0	17	3	0	0	0	21
Session Total	0	2	69	7	0	0	0	78	0	1	65	14	0	1	1	82	2	0	54	14	0	0	0	70



Fressingfield - Manual Traffic Survey, Thursday 28th September 2017

Junction: (2) B1116 / Stradbroke Road / New Street

Approach: B1116 (East)

TIME	Left to Stradbroke Road								Ahead to New Street								Right to B1116 (North)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	0	1	0	0	0	1	0	0	1	0	0	0	0	1	0	0	6	1	0	0	0	7
0745 - 0800	0	0	3	1	0	0	0	4	0	0	3	2	0	0	0	5	0	1	10	3	0	1	0	15
Hourly Total	0	0	3	2	0	0	0	5	0	0	4	2	0	0	0	6	0	1	16	4	0	1	0	22
0800 - 0815	0	0	3	1	0	0	0	4	0	0	1	1	0	0	0	2	0	0	4	1	0	0	0	5
0815 - 0830	1	0	3	0	0	0	0	4	0	0	5	1	0	0	0	6	0	0	5	2	0	1	0	8
0830 - 0845	0	0	9	0	0	0	0	9	0	0	4	1	0	0	0	5	0	0	9	0	1	0	0	10
0845 - 0900	0	0	5	0	0	0	0	5	0	0	4	1	0	0	0	5	0	1	8	2	0	1	0	12
Hourly Total	1	0	20	1	0	0	0	22	0	0	14	4	0	0	0	18	0	1	26	5	1	2	0	35
0900 - 0915	0	0	2	1	0	0	0	3	0	0	5	0	0	0	0	5	0	0	13	0	0	0	0	13
0915 - 0930	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	4	0	0	7	1	0	1	0	9
Hourly Total	0	0	2	1	0	0	0	3	0	0	8	1	0	0	0	9	0	0	20	1	0	1	0	22
Session Total	1	0	25	4	0	0	0	30	0	0	26	7	0	0	0	33	0	2	62	10	1	4	0	79
1630 - 1645	0	0	3	0	0	0	0	3	0	0	0	1	0	0	0	1	0	0	6	0	0	0	0	6
1645 - 1700	0	0	2	1	0	0	0	3	0	0	4	0	0	0	0	4	1	0	9	4	0	0	0	14
Hourly Total	0	0	5	1	0	0	0	6	0	0	4	1	0	0	0	5	1	0	15	4	0	0	0	20
1700 - 1715	0	0	4	0	0	0	0	4	0	0	10	0	0	0	0	10	0	0	14	5	2	0	0	21
1715 - 1730	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	2	0	0	12	4	0	0	0	16
1730 - 1745	0	0	1	0	0	0	0	1	2	1	1	0	0	0	0	4	0	0	13	5	0	0	0	18
1745 - 1800	0	0	1	0	0	0	0	1	1	0	2	0	0	0	0	3	0	0	9	1	0	0	0	10
Hourly Total	0	0	7	0	0	0	0	7	3	1	15	0	0	0	0	19	0	0	48	15	2	0	0	65
1800 - 1815	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	9	0	0	4	0	0	0	0	4
1815 - 1830	0	0	4	0	0	0	0	4	0	0	2	0	0	0	0	2	0	0	12	0	0	0	0	12
Hourly Total	0	0	4	0	0	0	0	4	0	0	11	0	0	0	0	11	0	0	16	0	0	0	0	16
Session Total	0	0	16	1	0	0	0	17	3	1	30	1	0	0	0	35	1	0	79	19	2	0	0	101



Fressingfield - Manual Traffic Survey, Thursday 28th September 2017

Junction: (2) B1116 / Stradbroke Road / New Street

Approach: Stradbroke Road

TIME	Left to New Street								Ahead to B1116 (North)								Right to B1116 (East)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	1	0	0	0	0	1	0	0	2	2	0	0	1	5	0	0	1	1	0	0	0	2
0745 - 0800	0	0	3	0	0	0	0	3	0	0	9	2	0	0	0	11	0	0	3	1	0	0	0	4
Hourly Total	0	0	4	0	0	0	0	4	0	0	11	4	0	0	1	16	0	0	4	2	0	0	0	6
0800 - 0815	0	0	5	0	0	0	0	5	0	0	11	2	0	0	0	13	0	0	3	1	0	0	0	4
0815 - 0830	0	0	2	0	0	0	1	3	0	0	8	1	1	0	0	10	0	0	3	0	0	0	1	4
0830 - 0845	0	0	4	0	0	0	0	4	0	0	13	1	0	0	0	14	0	0	5	0	0	0	0	5
0845 - 0900	0	0	9	1	0	0	0	10	0	0	24	2	1	1	0	28	0	0	8	0	0	0	0	8
Hourly Total	0	0	20	1	0	0	1	22	0	0	56	6	2	1	0	65	0	0	19	1	0	0	1	21
0900 - 0915	0	0	6	0	0	0	0	6	0	0	6	0	0	1	0	7	0	0	2	0	0	0	0	2
0915 - 0930	0	0	1	0	0	0	0	1	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0
Hourly Total	0	0	7	0	0	0	0	7	0	0	9	0	0	1	0	10	0	0	2	0	0	0	0	2
Session Total	0	0	31	1	0	0	1	33	0	0	76	10	2	2	1	91	0	0	25	3	0	0	1	29
1630 - 1645	0	0	2	0	0	0	0	2	0	0	11	0	0	0	0	11	0	1	2	0	0	0	0	3
1645 - 1700	0	0	1	0	0	0	0	1	0	0	9	2	0	0	0	11	0	0	2	0	0	0	0	2
Hourly Total	0	0	3	0	0	0	0	3	0	0	20	2	0	0	0	22	0	1	4	0	0	0	0	5
1700 - 1715	0	0	1	1	0	0	0	2	0	0	11	3	0	0	0	14	0	0	2	1	0	0	0	3
1715 - 1730	0	0	2	1	0	0	0	3	0	0	9	2	0	0	0	11	1	0	2	0	0	0	0	3
1730 - 1745	0	0	2	0	0	0	0	2	0	0	11	6	1	0	0	18	0	0	2	1	0	0	0	3
1745 - 1800	0	0	4	0	0	0	0	4	0	0	15	4	0	0	0	19	0	0	4	0	0	0	0	4
Hourly Total	0	0	9	2	0	0	0	11	0	0	46	15	1	0	0	62	1	0	10	2	0	0	0	13
1800 - 1815	0	0	1	0	0	0	0	1	0	0	6	0	0	0	0	6	0	0	1	0	0	0	0	1
1815 - 1830	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5	0	0	4	0	0	0	0	4
Hourly Total	0	0	1	0	0	0	0	1	0	0	11	0	0	0	0	11	0	0	5	0	0	0	0	5
Session Total	0	0	13	2	0	0	0	15	0	0	77	17	1	0	0	95	1	1	19	2	0	0	0	23



Fressingfield - Manual Traffic Survey, Thursday 28th September 2017

Junction: (2) B1116 / Stradbroke Road / New Street

Approach: New Street

TIME	Left to B1116 (North)								Ahead to B1116 (East)								Right to Stradbroke Road							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	6	2	0	0	0	8	0	0	3	1	0	0	0	4	0	0	1	0	0	0	0	1
0745 - 0800	0	0	6	3	1	0	0	10	0	0	4	0	0	0	0	4	0	0	2	0	0	0	0	2
Hourly Total	0	0	12	5	1	0	0	18	0	0	7	1	0	0	0	8	0	0	3	0	0	0	0	3
0800 - 0815	0	0	2	0	0	0	0	2	0	0	0	2	0	0	0	2	0	0	1	1	0	0	0	2
0815 - 0830	0	0	3	0	0	0	0	3	0	0	2	0	0	0	0	2	0	0	6	0	0	0	0	6
0830 - 0845	0	0	9	0	0	0	0	9	0	0	0	2	0	0	0	2	0	0	9	0	0	0	0	9
0845 - 0900	0	0	9	0	0	0	0	9	0	0	0	3	1	0	0	4	0	0	1	0	1	0	0	2
Hourly Total	0	0	23	0	0	0	0	23	0	0	2	7	1	0	0	10	0	0	17	1	1	0	0	19
0900 - 0915	0	0	8	2	0	0	0	10	0	0	0	5	0	1	0	6	0	0	4	0	1	0	0	5
0915 - 0930	0	0	5	1	0	0	0	6	0	0	0	3	0	0	0	3	0	0	1	0	0	0	0	1
Hourly Total	0	0	13	3	0	0	0	16	0	0	0	8	0	1	0	9	0	0	5	0	1	0	0	6
Session Total	0	0	48	8	1	0	0	57	0	0	9	16	1	1	0	27	0	0	25	1	2	0	0	28
1630 - 1645	0	0	5	1	0	0	0	6	0	0	4	1	0	0	0	5	0	0	2	0	0	0	0	2
1645 - 1700	0	0	8	0	0	0	0	8	0	0	6	3	0	0	0	9	0	0	2	1	1	0	0	4
Hourly Total	0	0	13	1	0	0	0	14	0	0	10	4	0	0	0	14	0	0	4	1	1	0	0	6
1700 - 1715	0	0	9	2	0	1	0	12	0	0	1	1	0	0	0	2	0	0	0	1	0	0	0	1
1715 - 1730	1	0	8	0	0	0	0	9	0	0	7	0	0	0	0	7	0	0	1	1	0	0	0	2
1730 - 1745	0	0	10	1	0	0	0	11	0	0	1	0	0	0	0	1	0	0	3	0	0	0	0	3
1745 - 1800	0	0	7	0	0	0	0	7	2	0	2	1	0	0	0	5	0	0	2	0	0	0	0	2
Hourly Total	1	0	34	3	0	1	0	39	2	0	11	2	0	0	0	15	0	0	6	2	0	0	0	8
1800 - 1815	0	0	11	0	0	0	0	11	0	0	2	0	0	0	0	2	0	0	3	0	0	0	0	3
1815 - 1830	0	0	2	1	0	0	0	3	0	0	3	0	0	0	0	3	0	0	1	0	0	0	0	1
Hourly Total	0	0	13	1	0	0	0	14	0	0	5	0	0	0	0	5	0	0	4	0	0	0	0	4
Session Total	1	0	60	5	0	1	0	67	2	0	26	6	0	0	0	34	0	0	14	3	1	0	0	18



Fressingfield - Manual Traffic Survey, Thursday 28th September 2017

Junction: (3) B1116 / B1123 / Unnamed Road

Approach: B1116 (North)

TIME	Left to B1123								Ahead to B1116 (South)								Right to Unnamed Road							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	10	4	0	0	1	15	0	0	18	7	0	2	1	28	0	0	8	1	0	0	0	9
0745 - 0800	0	0	12	2	2	0	0	16	1	0	29	5	2	1	0	38	0	0	8	1	0	0	0	9
Hourly Total	0	0	22	6	2	0	1	31	1	0	47	12	2	3	1	66	0	0	16	2	0	0	0	18
0800 - 0815	0	0	9	4	0	0	0	13	0	0	28	5	3	1	0	37	0	0	2	0	0	0	0	2
0815 - 0830	0	0	10	3	1	0	0	14	0	0	36	4	3	0	0	43	3	0	0	0	0	0	0	3
0830 - 0845	0	0	7	4	0	0	0	11	0	0	30	5	3	1	0	39	0	1	4	0	1	0	0	6
0845 - 0900	0	0	5	5	1	0	0	11	0	0	11	2	1	0	0	14	0	0	5	1	0	0	0	6
Hourly Total	0	0	31	16	2	0	0	49	0	0	105	16	10	2	0	133	3	1	11	1	1	0	0	17
0900 - 0915	0	0	7	5	0	0	0	12	0	1	20	3	1	0	0	25	0	0	1	2	0	0	0	3
0915 - 0930	0	0	8	3	1	0	0	12	0	0	15	5	0	1	0	21	0	0	3	1	1	0	0	5
Hourly Total	0	0	15	8	1	0	0	24	0	1	35	8	1	1	0	46	0	0	4	3	1	0	0	8
Session Total	0	0	68	30	5	0	1	104	1	1	187	36	13	6	1	245	3	1	31	6	2	0	0	43
1630 - 1645	1	0	9	2	0	0	0	12	0	0	25	4	0	1	0	30	0	0	7	1	0	0	0	8
1645 - 1700	1	1	20	6	0	0	0	28	0	0	29	4	0	0	0	33	0	0	4	0	0	0	0	4
Hourly Total	2	1	29	8	0	0	0	40	0	0	54	8	0	1	0	63	0	0	11	1	0	0	0	12
1700 - 1715	0	0	23	2	0	0	0	25	0	1	43	11	0	0	0	55	0	0	5	1	0	0	0	6
1715 - 1730	0	0	25	2	0	0	0	27	0	2	38	6	0	0	0	46	0	0	7	0	1	0	0	8
1730 - 1745	0	0	13	2	0	0	0	15	0	1	25	5	1	0	0	32	0	0	2	3	0	0	0	5
1745 - 1800	0	1	20	3	0	0	0	24	0	0	21	1	0	0	0	22	0	0	3	1	0	0	0	4
Hourly Total	0	1	81	9	0	0	0	91	0	4	127	23	1	0	0	155	0	0	17	5	1	0	0	23
1800 - 1815	0	0	15	1	0	0	0	16	0	0	34	4	0	0	0	38	2	0	5	0	0	0	0	7
1815 - 1830	0	0	15	1	0	0	0	16	0	0	27	2	0	0	0	29	0	0	3	0	0	0	0	3
Hourly Total	0	0	30	2	0	0	0	32	0	0	61	6	0	0	0	67	2	0	8	0	0	0	0	10
Session Total	2	2	140	19	0	0	0	163	0	4	242	37	1	1	0	285	2	0	36	6	1	0	0	45



Fressingfield - Manual Traffic Survey, Thursday 28th September 2017

Junction: (3) B1116 / B1123 / Unnamed Road

Approach: B1123

TIME	Left to B1116 (South)								Ahead to Unnamed Road								Right to B1116 (North)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	4	0	0	0	14
0745 - 0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	2	1	0	0	15
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	6	1	0	0	29
0800 - 0815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	3	0	1	0	21
0815 - 0830	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	10	0	2	0	0	13
0830 - 0845	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	3	0	0	0	9
0845 - 0900	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	12	2	2	0	0	16
Hourly Total	0	0	2	0	0	0	0	2	0	0	1	0	0	0	1	0	1	45	8	4	1	0	59	
0900 - 0915	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	4	1	1	0	16
0915 - 0930	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	1	1	0	0	5
Hourly Total	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	13	5	2	1	0	21	
Session Total	0	0	3	0	0	0	0	3	0	0	1	0	0	0	0	1	0	1	80	19	7	2	0	109
1630 - 1645	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	11	4	0	0	0	15
1645 - 1700	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	2	0	0	2	17
Hourly Total	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	24	6	0	0	2	32	
1700 - 1715	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19	1	0	0	0	20
1715 - 1730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	2	1	0	0	15
1730 - 1745	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	19	6	0	1	0	26
1745 - 1800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	1	1	2	0	17
Hourly Total	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	63	10	2	3	0	78	
1800 - 1815	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	6	0	1	0	18
1815 - 1830	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	9	1	1	0	0	11
Hourly Total	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	20	7	1	1	0	29	
Session Total	0	0	1	1	0	0	0	2	0	0	0	1	0	0	0	1	0	0	107	23	3	4	2	139



Fressingfield - Manual Traffic Survey, Thursday 28th September 2017

Junction: (3) B1116 / B1123 / Unnamed Road

Approach: B1116 (South)

TIME	Left to Unnamed Road								Ahead to B1116 (North)								Right to B1123							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	0	0	0	0	0	0	0	0	21	4	0	1	0	26	0	0	0	0	0	0	0	0
0745 - 0800	0	0	0	0	0	0	0	0	0	1	35	10	1	0	1	48	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	1	56	14	1	1	1	74	0	0	0	0	0	0	0	0
0800 - 0815	0	0	0	0	0	0	0	0	0	0	23	4	1	1	0	29	0	0	0	0	0	0	0	0
0815 - 0830	0	0	1	0	0	0	0	1	0	0	24	6	2	0	0	32	0	0	0	0	0	0	0	0
0830 - 0845	0	0	0	0	0	0	0	0	0	0	33	2	2	1	0	38	0	0	0	0	0	0	0	0
0845 - 0900	0	0	0	1	0	0	0	1	0	0	32	7	1	1	0	41	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	1	0	0	0	2	0	0	112	19	6	3	0	140	0	0	0	0	0	0	0	0
0900 - 0915	0	0	0	0	0	0	0	0	0	1	33	1	1	3	0	39	0	0	0	0	0	0	0	0
0915 - 0930	0	0	0	0	0	0	0	0	0	0	31	6	1	0	0	38	0	0	1	0	0	0	0	1
Hourly Total	0	0	0	0	0	0	0	0	0	1	64	7	2	3	0	77	0	0	1	0	0	0	0	1
Session Total	0	0	1	1	0	0	0	2	0	2	232	40	9	7	1	291	0	0	1	0	0	0	0	1
1630 - 1645	0	0	0	0	0	0	0	0	0	0	31	5	0	0	1	37	0	0	1	0	0	0	0	1
1645 - 1700	0	0	1	0	0	0	0	1	1	0	26	9	0	0	0	36	0	0	0	0	0	0	0	0
Hourly Total	0	0	1	0	0	0	0	1	1	0	57	14	0	0	1	73	0	0	1	0	0	0	0	1
1700 - 1715	0	0	0	0	0	0	0	0	0	0	31	11	2	0	0	44	0	0	0	0	0	0	0	0
1715 - 1730	0	0	0	0	0	0	0	0	0	0	29	6	1	0	0	36	0	0	0	0	0	0	0	0
1730 - 1745	0	0	0	0	0	0	0	0	0	0	32	6	2	0	0	40	0	0	0	0	0	0	0	0
1745 - 1800	0	0	0	0	0	0	0	0	1	0	48	11	1	0	0	61	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	1	0	140	34	6	0	0	181	0	0	0	0	0	0	0	0
1800 - 1815	0	0	0	0	0	0	0	0	0	0	20	5	0	0	0	25	0	0	0	0	0	0	0	0
1815 - 1830	0	0	0	0	0	0	0	0	0	0	23	2	0	0	0	25	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	43	7	0	0	0	50	0	0	0	0	0	0	0	0
Session Total	0	0	1	0	0	0	0	1	2	0	240	55	6	0	1	304	0	0	1	0	0	0	0	1



Fressingfield - Manual Traffic Survey, Thursday 28th September 2017

Junction: (3) B1116 / B1123 / Unnamed Road

Approach: Unnamed Road

TIME	Left to B1116 (North)								Ahead to B1123								Right to B1116 (South)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	3	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0745 - 0800	0	0	2	3	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	5	4	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0800 - 0815	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0815 - 0830	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0830 - 0845	0	0	3	1	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0845 - 0900	0	0	4	1	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	14	2	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0900 - 0915	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0915 - 0930	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	0	0	3	1	0	1	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Session Total	0	0	22	7	0	1	0	30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1630 - 1645	1	1	18	3	0	0	0	23	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1645 - 1700	1	0	1	1	0	0	0	3	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
Hourly Total	2	1	19	4	0	0	0	26	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
1700 - 1715	0	1	3	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1715 - 1730	1	0	3	1	0	0	0	5	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1730 - 1745	0	0	5	1	0	0	0	6	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
1745 - 1800	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hourly Total	1	1	18	2	0	0	0	22	0	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0
1800 - 1815	1	0	4	2	0	0	0	7	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
1815 - 1830	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
Hourly Total	1	0	7	2	0	0	0	10	1	0	0	0	0	0	0	1	0	0	2	0	0	0	0	2
Session Total	4	2	44	8	0	0	0	58	1	0	4	0	0	0	0	5	0	0	2	0	0	0	0	2



Fressingfield - Manual Traffic Survey, Thursday 28th September 2017

Junction: (1) B1116 / Cratfield Road / Access Road

Approach: Cratfield Road

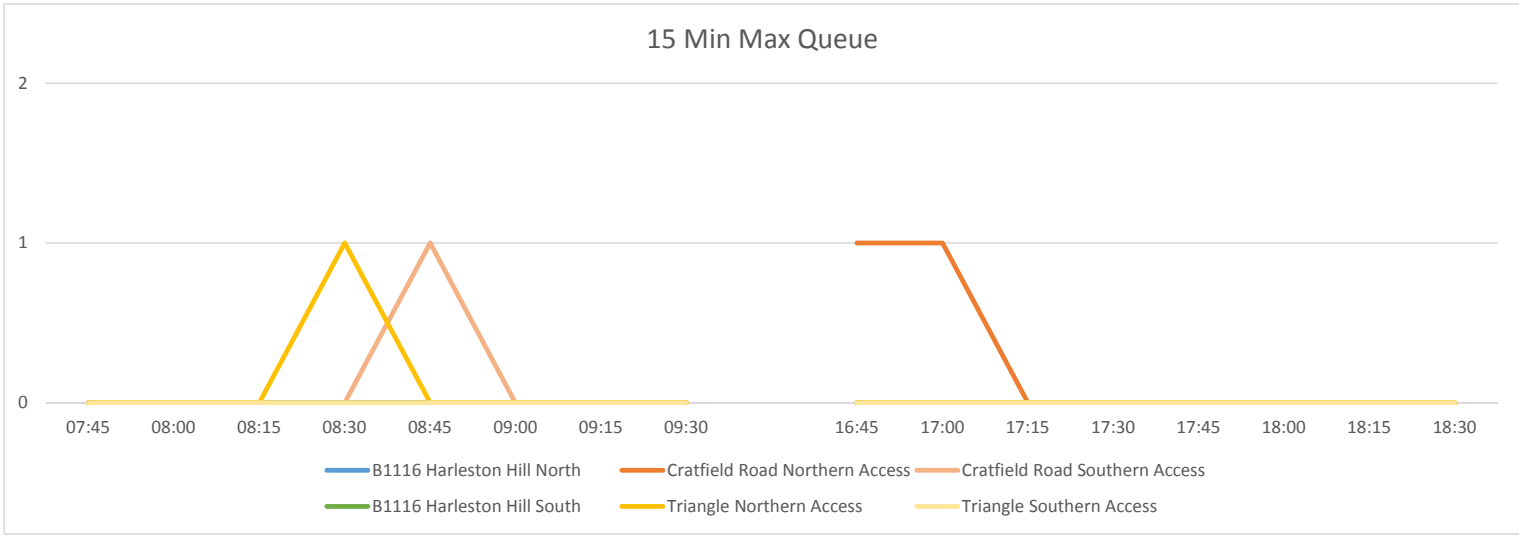
TIME	Left to B1116 (South)								Ahead to Access Road								Right to B1116 (North)							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
0745 - 0800	0	0	6	1	0	0	0	7	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
Hourly Total	0	0	7	2	0	0	0	9	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8
0800 - 0815	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
0815 - 0830	0	0	9	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0830 - 0845	0	0	11	1	0	0	0	12	0	0	0	0	0	0	0	0	0	0	4	1	0	0	0	5
0845 - 0900	0	0	7	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	4
Hourly Total	0	0	32	1	0	0	0	33	0	0	0	0	0	0	0	0	0	0	9	1	0	0	0	10
0900 - 0915	0	0	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
0915 - 0930	0	0	2	1	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Hourly Total	0	0	5	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	2
Session Total	0	0	44	4	0	0	0	48	0	0	0	0	0	0	0	0	0	0	17	2	0	1	0	20
1630 - 1645	0	0	5	1	0	0	1	7	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	8
1645 - 1700	1	0	5	0	0	0	0	6	0	0	1	0	0	0	0	1	0	0	5	0	0	0	0	5
Hourly Total	1	0	10	1	0	0	1	13	0	0	1	0	0	0	1	0	0	0	13	0	0	0	0	13
1700 - 1715	0	0	3	3	0	0	0	6	0	0	1	0	0	0	0	1	0	0	2	0	0	0	0	2
1715 - 1730	0	0	4	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1
1730 - 1745	0	0	2	2	0	0	0	4	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	3
1745 - 1800	0	0	5	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	2
Hourly Total	0	0	14	6	0	0	0	20	0	0	1	0	0	0	1	0	0	0	5	1	2	0	0	8
1800 - 1815	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2
1815 - 1830	0	0	5	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	3
Hourly Total	0	0	6	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	5
Session Total	1	0	30	7	0	0	1	39	0	0	2	0	0	0	2	0	0	0	23	1	2	0	0	26

Junction: (1) B1116 / Cratfield Road / Access Road

Approach: B1116 (South)

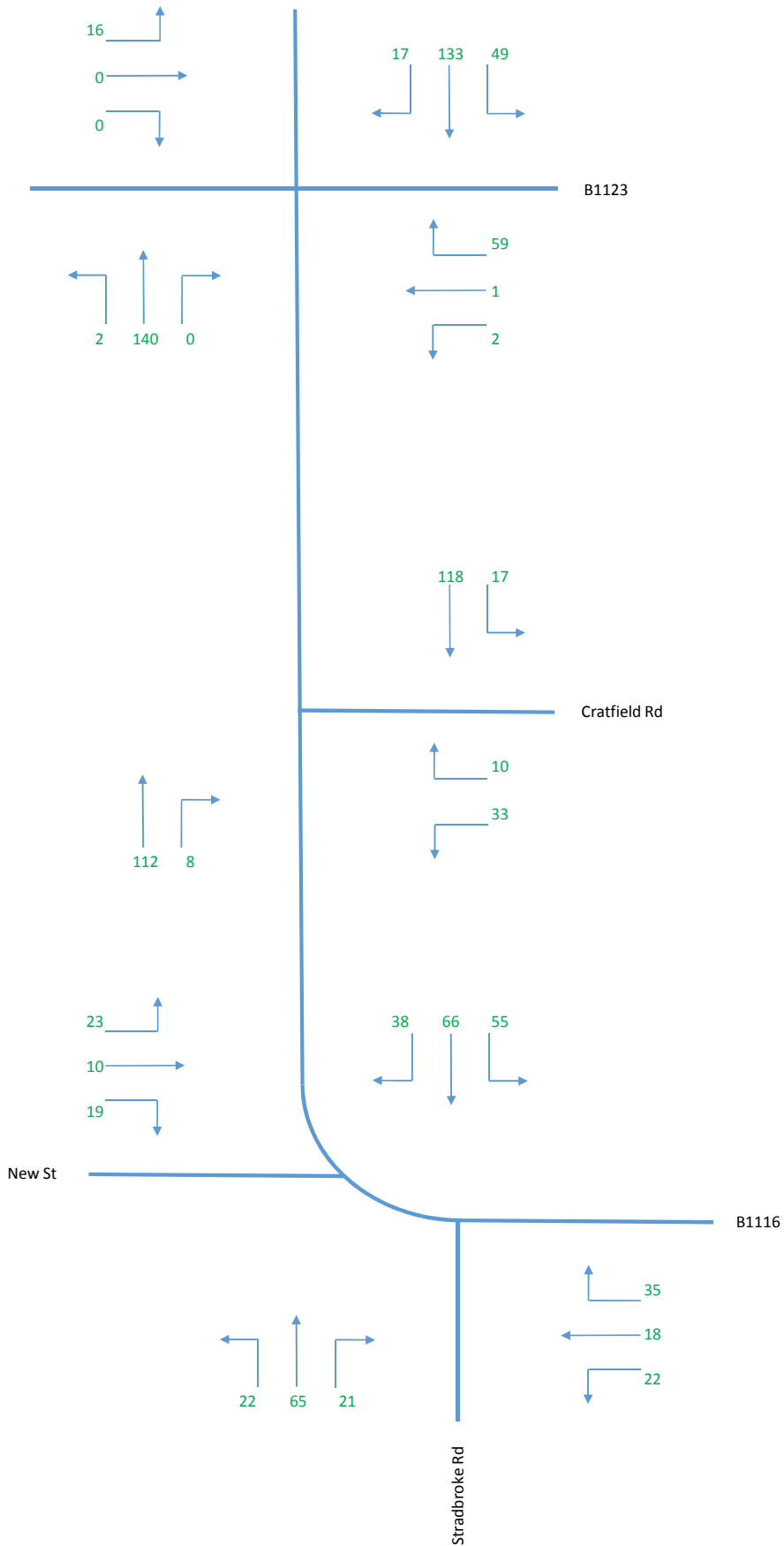
TIME	Left to Access Road								Ahead to B1116 (North)								Right to Cratfield Road							
	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL	P/CYCLE	M/CYCLE	CAR	LGV	OGV1	OGV2	BUS	TOTAL
0730 - 0745	0	0	0	1	0	0	0	1	0	0	15	2	0	0	1	18	0	0	1	3	0	0	0	4
0745 - 0800	0	0	0	0	1	0	0	1	0	1	21	7	0	1	0	30	0	0	3	0	0	0	0	3
Hourly Total	0	0	0	1	1	0	0	2	0	1	36	9	0	1	1	48	0	0	4	3	0	0	0	7
0800 - 0815	0	0	0	0	0	0	0	0	0	0	14	2	0	0	0	16	0	0	2	0	0	0	0	2
0815 - 0830	0	0	0	0	0	0	0	0	0	0	12	4	1	0	0	17	0	0	2	0	0	0	0	2
0830 - 0845	0	0	0	0	0	0	0	0	0	0	29	1	1	1	0	32	0	0	1	0	0	0	0	1
0845 - 0900	0	0	0	0	0	0	0	0	0	1	40	3	1	2	0	47	0	0	2	1	0	0	0	3
Hourly Total	0	0	0	0	0	0	0	0	0	1	95	10	3	3	0	112	0	0	7	1	0	0	0	8
0900 - 0915	0	0	0	0	0	0	0	0	0	0	26	1	0	2	0	29	0	0	1	1	0	0	0	2
0915 - 0930	0	0	0	0	0	0	0	0	0	0	16	2	0	0	0	18	0	0	0	0	0	0	0	0
Hourly Total	0	0	0	0	0	0	0	0	0	0	42	3	0	2	0	47	0	0	1	1	0	0	0	2
Session Total	0	0	0	1	1	0	0	2	0	2	173	22	3	6	1	207	0	0	12	5	0	0	0	17
1630 - 1645	0	0	0	0	0	0	0	0	0	0	18	1	0	0	0	19	0	0	3	1	0	0	0	4
1645 - 1700	0	0	0	0	0	0	0	0	2	0	23	4	0	0	0	29	0	0	3	1	0	0	0	4
Hourly Total	0	0	0	0	0	0	0	0	2	0	41	5	0	0	0	48	0	0	6	2	0	0	0	8
1700 - 1715	0	0	0	0	0	0	0	0	0	0	32	8	2	1	0	43	0	0	2	1	0	0	0	3
1715 - 1730	0	0	0	0	0	0	0	0	0	0	22	7	0	0	0	29	0	0	6	0	0	0	0	6
1730 - 1745	0	0	0	0	0	0	0	0	0	0	32	9	1	0	0	42	0	0	3	2	0	0	0	5
1745 - 1800	0	0	0	0	0	0	0	0	0	0	27	5	0	0	0	32	0	0	5	0	0	0	0	5
Hourly Total	0	0	0	0	0	0	0	0	0	0	113	29	3	1	0	146	0	0	16	3	0	0	0	19
1800 - 1815	0	0	0	0	0	0	0	0	0	0	16	0	0	0	0	16	0	0	3	0	0	0	0	3
1815 - 1830	0	0	0	0	0	0	0	0	0	0	15	0	0	0	0	15	0	0	4	1	0	0	0	5
Hourly Total	0	0	0	0	0	0	0	0	0	0	31	0	0	0	0	31	0	0	7	1	0	0	0	8
Session Total	0	0	0	0	0	0	0	0	2	0	185	34	3	1	0	225	0	0	29	6	0	0	0	35

Time	B1116 Harleston Hill North	Cratfield Road Northern Access	Cratfield Road Southern Access	B1116 Harleston Hill South	Triangle Northern Access	Triangle Southern Access
07:45	0	0	0	0	0	0
08:00	0	0	0	0	0	0
08:15	0	0	0	0	0	0
08:30	0	0	0	0	1	0
08:45	0	0	1	0	0	0
09:00	0	0	0	0	0	0
09:15	0	0	0	0	0	0
09:30	0	0	0	0	0	0
16:45	0	1	0	0	0	0
17:00	0	1	0	0	0	0
17:15	0	0	0	0	0	0
17:30	0	0	0	0	0	0
17:45	0	0	0	0	0	0
18:00	0	0	0	0	0	0
18:15	0	0	0	0	0	0
18:30	0	0	0	0	0	0

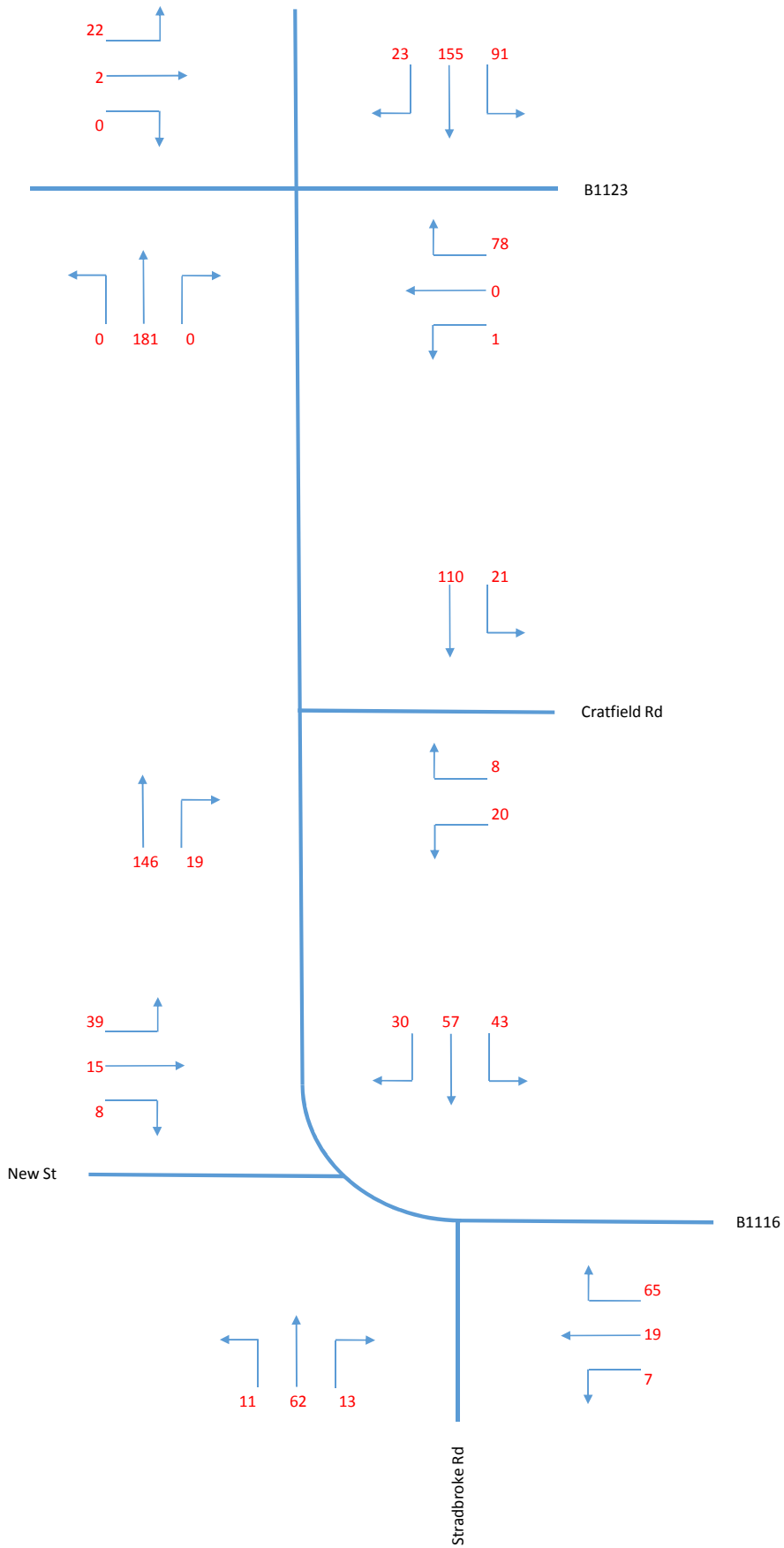


ENCLOSURE 2

Background Traffic
AM Surveyed Flows

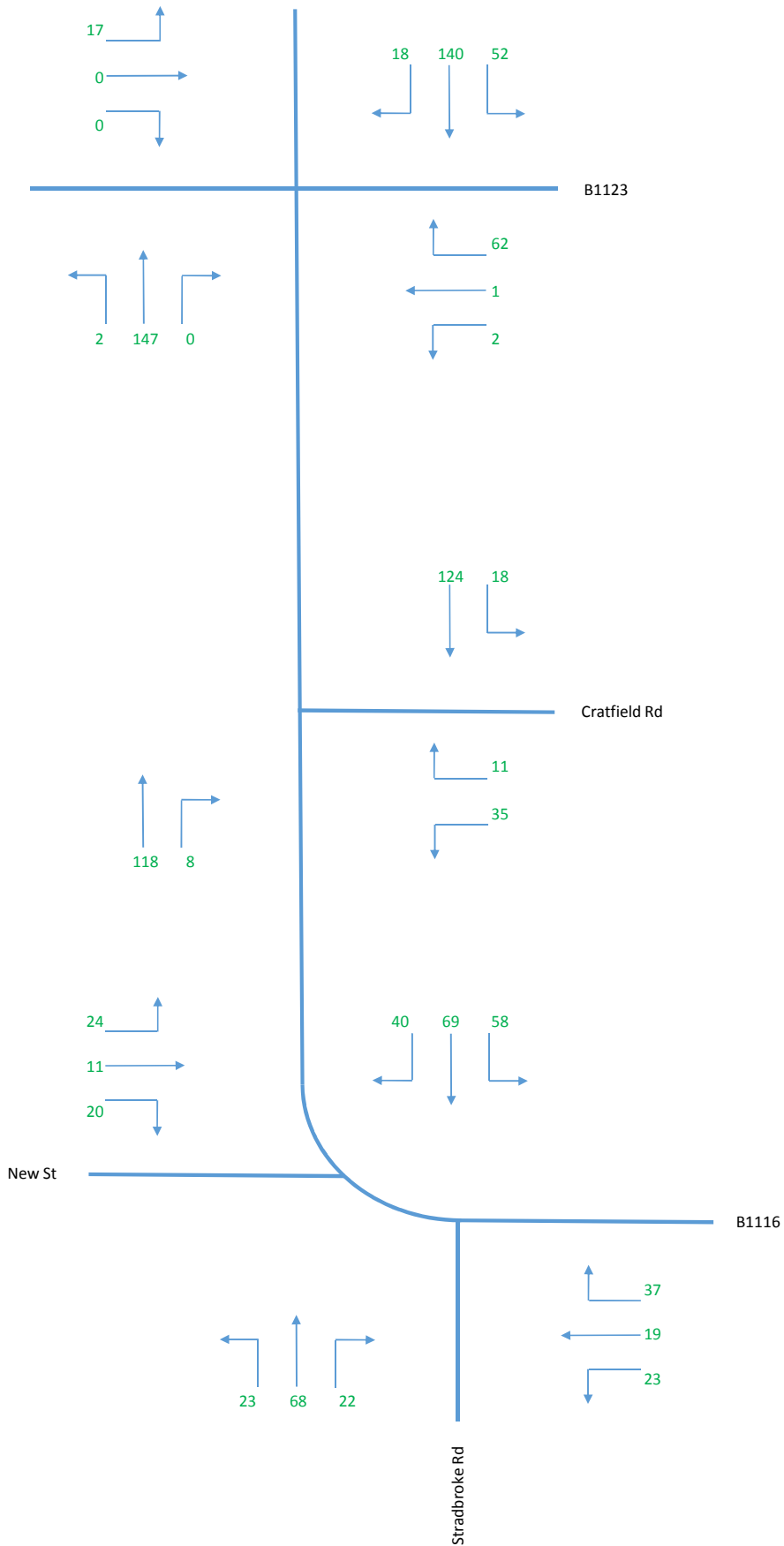


Background Traffic
PM Surveyed Flows



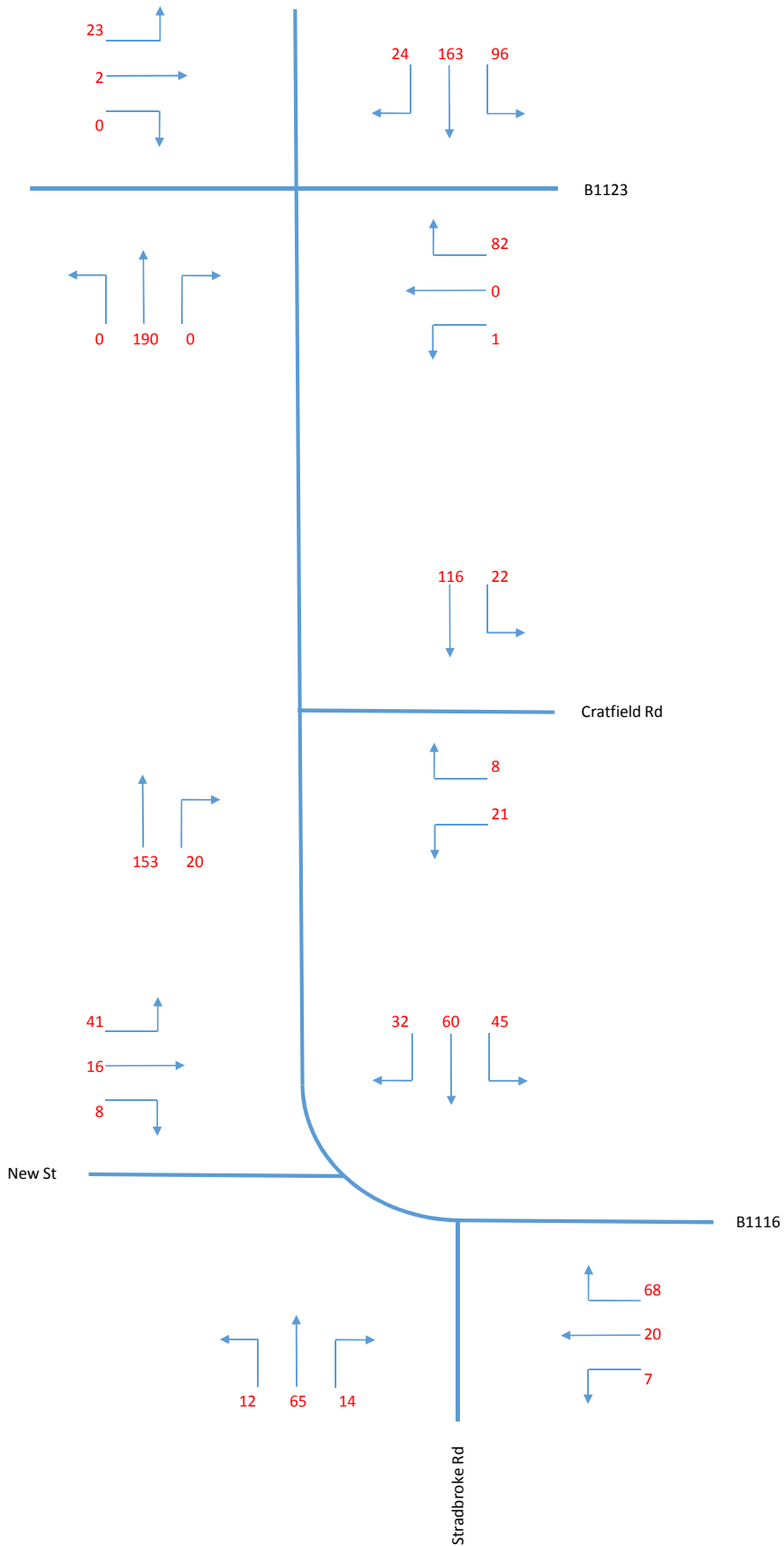
Background Traffic
AM Surveyed Flows + Growth

2017-22 AM Growth Factor - 1.0516
2017-22 PM Growth Factor - 1.0511



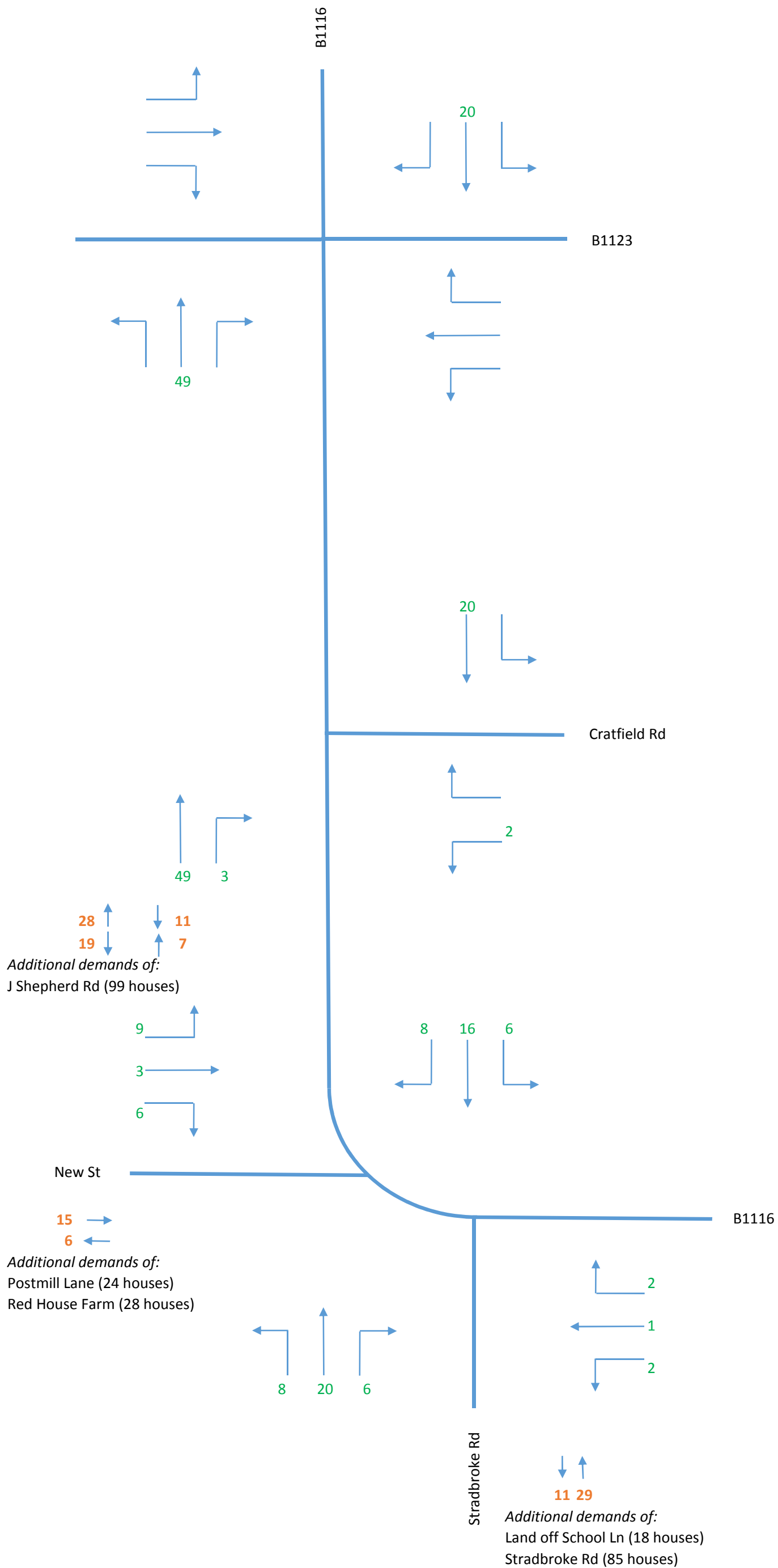
Background Traffic
PM Surveyed Flows + Growth

2017-22 AM Growth Factor - 1.0516
2017-22 PM Growth Factor - 1.0511



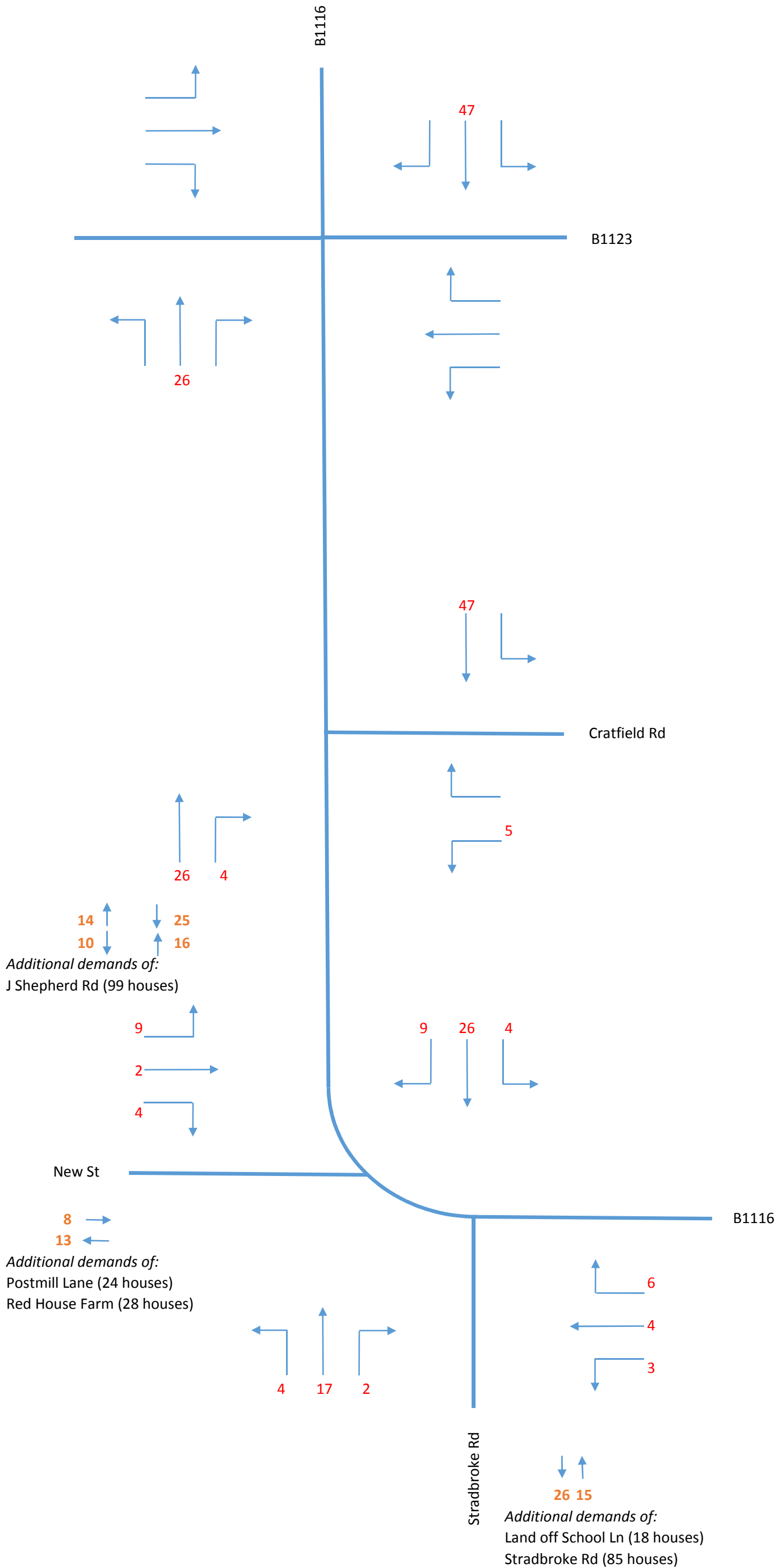
AM Dev Flows

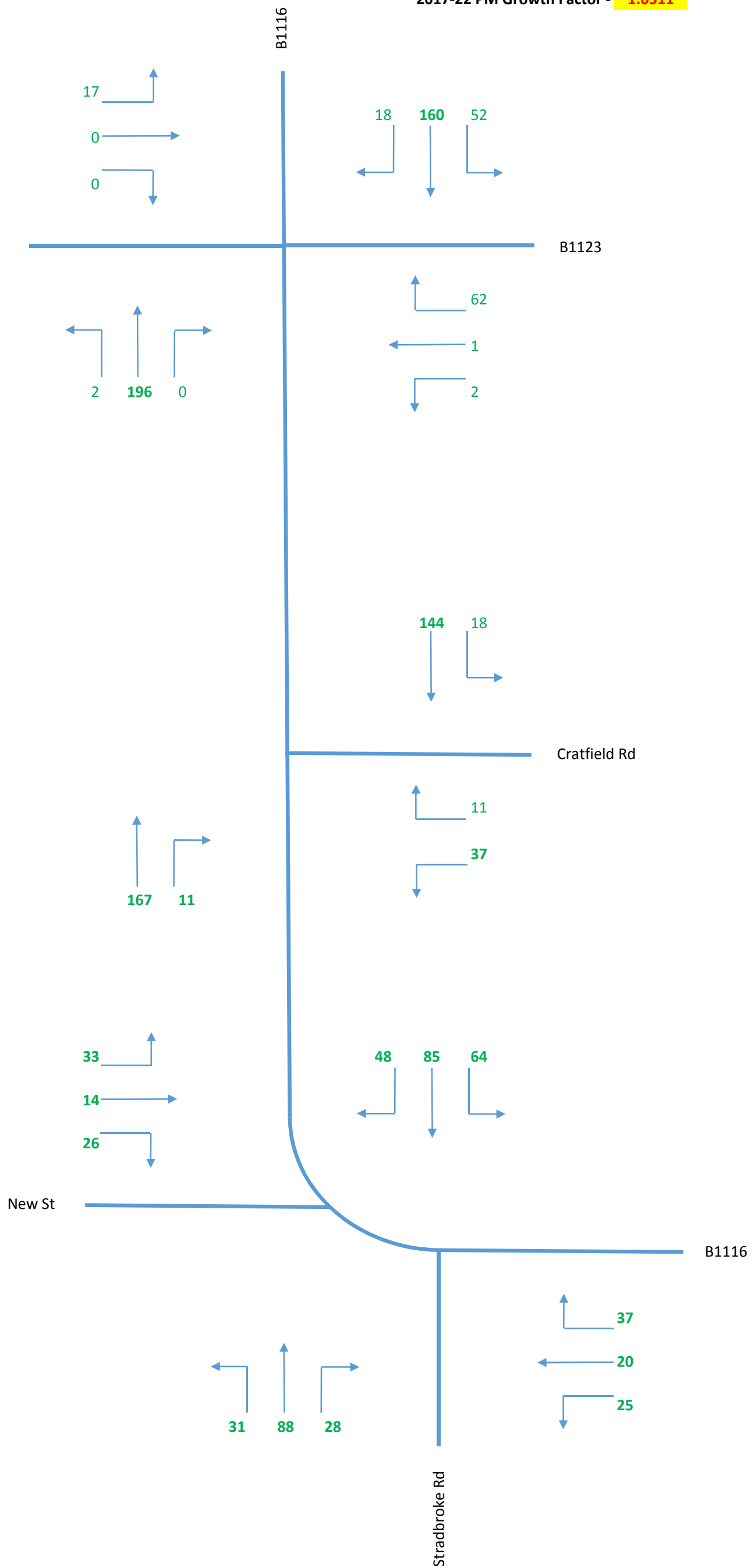
Note: Trips for all schemes based on TRICS samples included in Create TS reports for John Shepherd Rd and Stradbroke Rd, then factored up by 25%, distributions based on recent ATC and MCTC surveys.

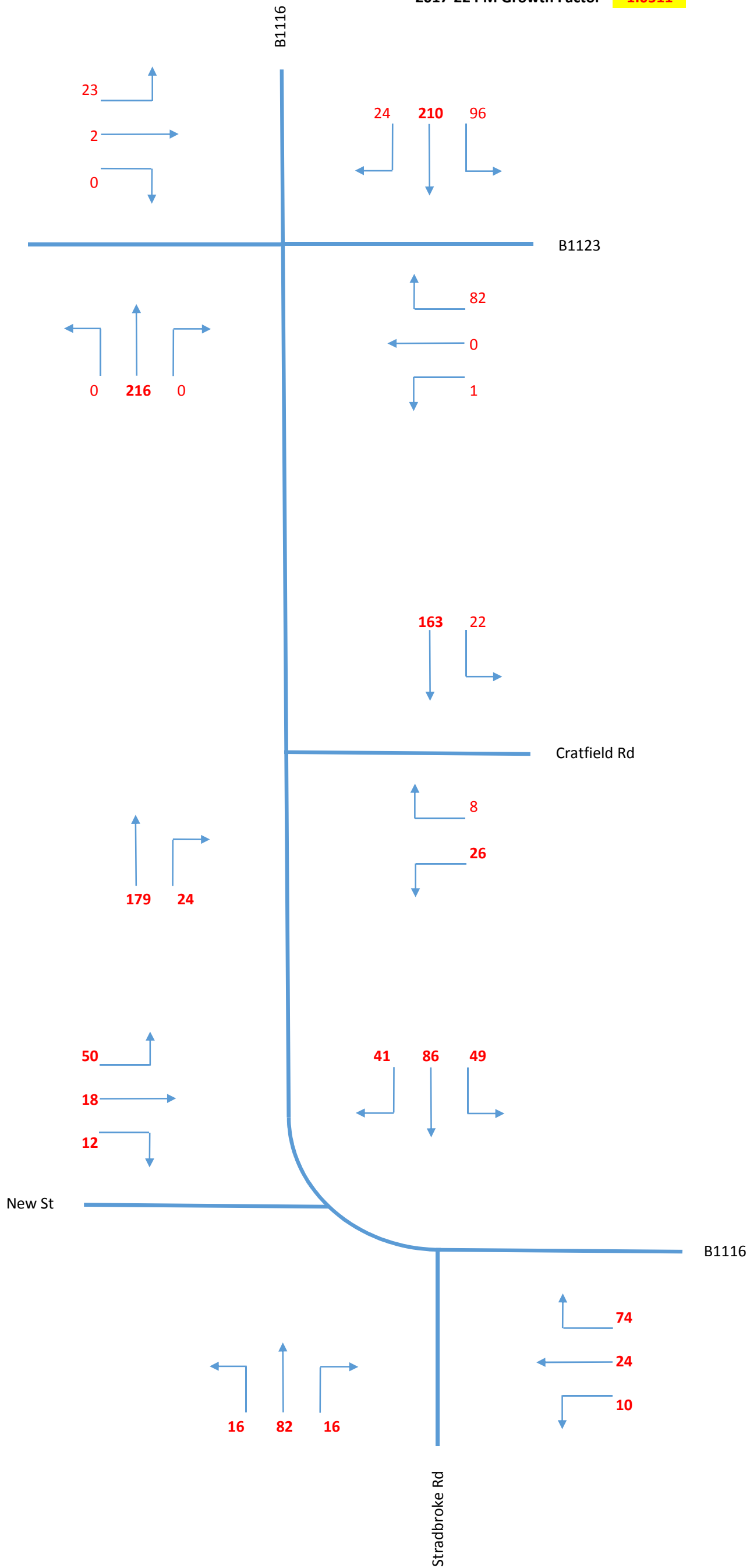


PM Dev Flows

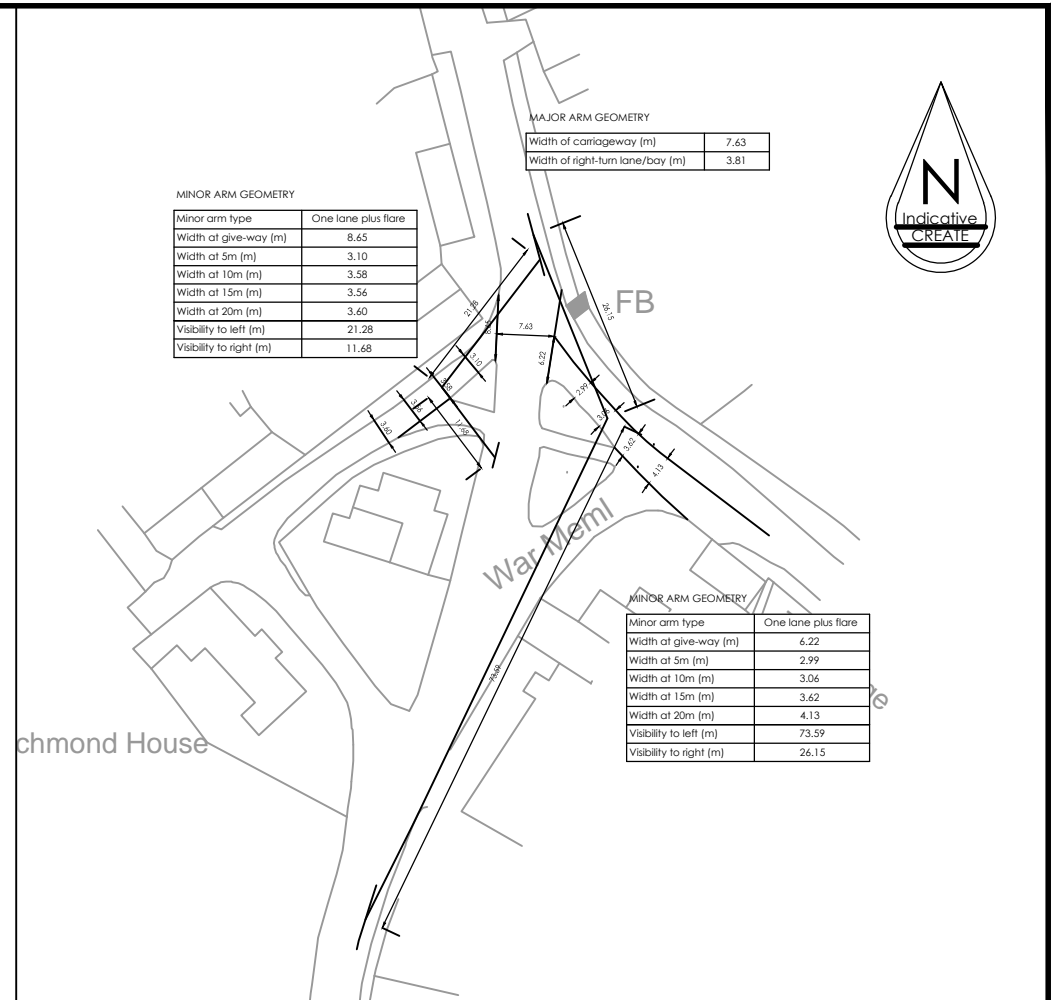
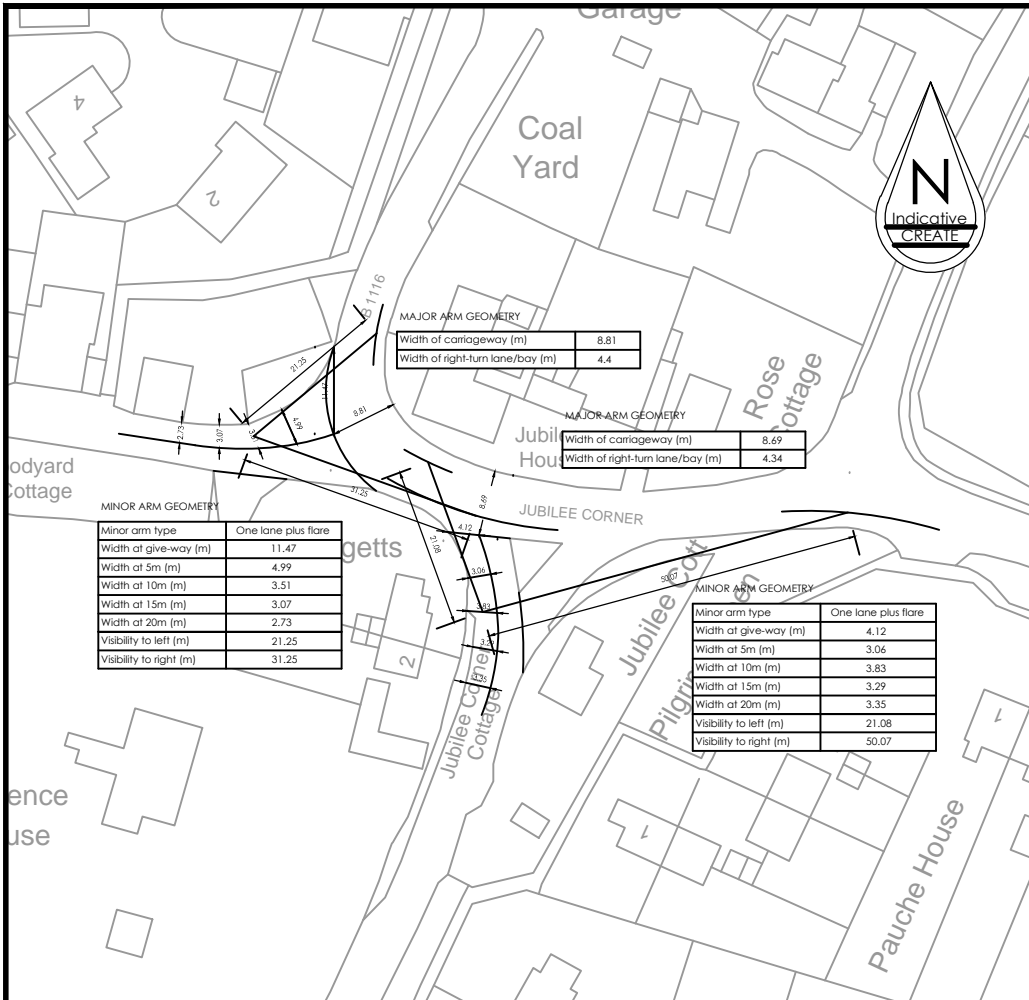
Note: Trips for all schemes based on TRICS samples included in Create TS reports for John Shepherd Rd and Stradbroke Rd, then factored up by 25%, distributions based on recent ATC and MCTC surveys.








ENCLOSURE 3



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REV	DATE	AMENDMENT DETAILS	DRAWN	APPROVED

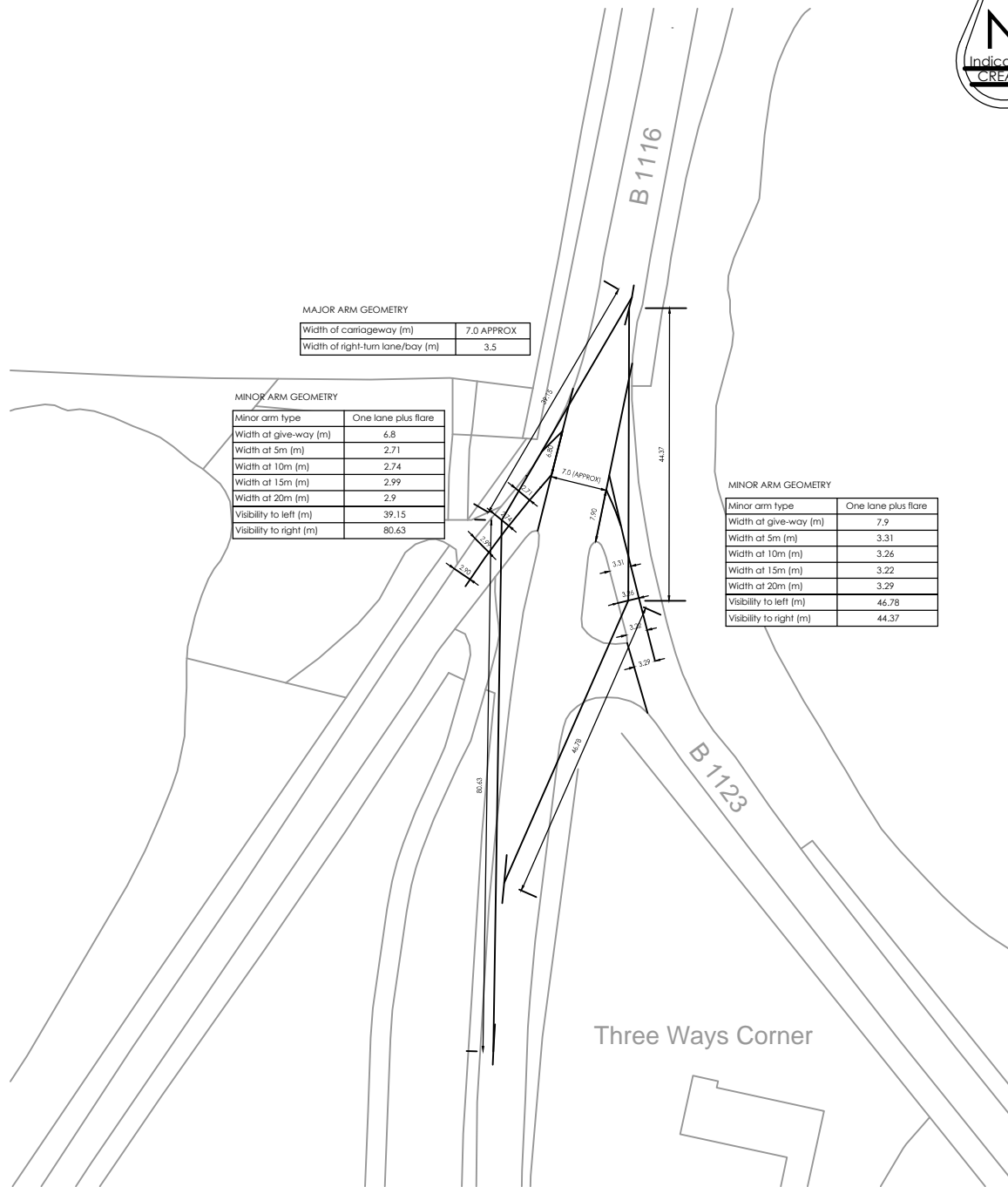
PROJECT FRESSINGFIELD CUMULATIVE ASSESSMENT	DATE 10.10.17	DRAWING STATUS INFORMATION	
	SCALE(S) 1:1000	DESIGNED AF	DRAWN AF
DRAWING TITLE PICADY GEOMETRY 1 OF 2	CHECKED MDA		APPROVED MDA
	JOB No 1151		
CLIENT WEST HOUSE FARM	DRAWING No 03/104	REVISION -	



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ORIGINAL SHEET SIZE - A4 Landscape
DO NOT SCALE



MAJOR ARM GEOMETRY

Width of carriageway (m)	7.0 APPROX
Width of right-turn lane/bay (m)	3.5

MINOR ARM GEOMETRY

Minor arm type	One lane plus flare
Width at give-way (m)	6.8
Width at 5m (m)	2.71
Width at 10m (m)	2.74
Width at 15m (m)	2.99
Width at 20m (m)	2.9
Visibility to left (m)	39.15
Visibility to right (m)	80.63

MINOR ARM GEOMETRY

Minor arm type	One lane plus flare
Width at give-way (m)	7.9
Width at 5m (m)	3.31
Width at 10m (m)	3.26
Width at 15m (m)	3.22
Width at 20m (m)	3.29
Visibility to left (m)	46.78
Visibility to right (m)	44.37

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REV	DATE	AMENDMENT DETAILS	DRAWN	APPROVED

PROJECT PRESSINGFIELD CUMULATIVE ASSESSMENT	DATE 10.10.17	DRAWING STATUS INFORMATION	
	SCALE(S) 1:1000	DESIGNED AF	DRAWN AF
DRAWING TITLE PICADY GEOMETRY 2 OF 2	CHECKED MDA	APPROVED MDA	JOB No 1151
	CLIENT WEST HOUSE FARM	DRAWING No 03/105	



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ORIGINAL SHEET SIZE - A4 Portrait
DO NOT SCALE

ENCLOSURE 4

Junctions 9

PICADY 9 - Priority Intersection Module

Version: 9.0.1.4646 []
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Filename: New Street and Stradbroke Road junctions.j9

Path: W:\2.0 NEW PROJECTS\2016\P16-1151 Fressingfield Sites\Cumulative Assessment

Report generation date: 10-Oct-17 2:46:52 PM

»2022, AM

»2022, PM

Summary of junction performance

	AM							PM							
	Q (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap	Q (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap	
[Lane Simulation] - 2022															
Junction 1-2 - Arm A	0.0	0.00		A	2.74	A	%	0.0	0.00		A	2.64	A	%	
Junction 1-2 - Arm B	0.3	9.34		A				0.2	9.21		A				
Junction 1-2 - Arm C	0.1	2.75		A				0.1	2.63		A				
Junction 2-2 - Arm A	0.0	0.00		A	5.70	A	[]	0.0	0.00		A	4.52	A	[]	
Junction 2-2 - Arm B	0.3	8.86		A				0.3	7.73		A				
Junction 2-2 - Arm C	0.4	5.66		A				0.3	5.25		A				

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of Av. delay per arriving vehicle. Arm and junction delays are Av.s for all movements, including movements with zero delay. Res Cap indicates the amount by which network flow could be increased before a user-definable threshold (see Analysis Options) is met.

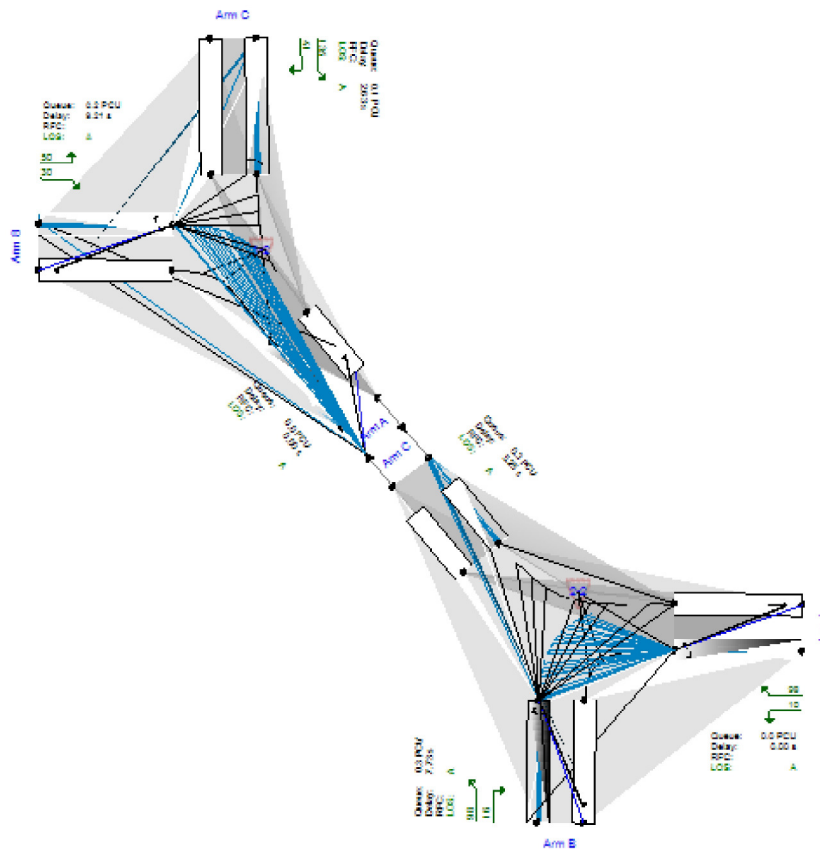
File summary

File Description

Title	Fressingfield Cumulative Assessment
Location	
Site number	
Date	09-Oct-17
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MDA
Description	

Units

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



Flows show original traffic demand (PCU/h)
 Lane simulation visualisation time: 16:45:00
 The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Lane Simulation options

Stop criteria (%)	Stop criteria time (s)	Stop criteria number of trials	Random seed	Results refresh speed (s)	Individual vehicle animation number of trials	Use crossings quick response	Last run random seed	Last run number of trials	Last run time taken (s)
1.00	100000	100000	-1	3	1	✓	1142747757	101	2.77

Demand Set Summary

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

Analysis Set Details

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

2022, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1-2	New St/B1116	T-Junction	Two-way	2.74	A
2-2	Stradbroke Rd/B1116	T-Junction	Two-way	5.70	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Arms

Arms

Junction	Arm	Name	Description	Arm type
1-2	A	B1116 (S) J1		Major
	B	New St		Minor
	C	B1116 (N) J1		Major
2-2	A	B1116 (E) J2		Major
	B	Stradbroke Rd		Minor
	C	B1116 (N) J2		Major

Major Arm Geometry

Junction	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
1-2	C	8.81			20.0	✓	0.00
2-2	C	9.81			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

Junction	Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
1-2	B	One lane	2.73	21	31
2-2	B	One lane	3.35	21	51

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
1-2	B-A	486	0.078	0.197	0.124	0.281
1-2	B-C	626	0.084	0.213	-	-
1-2	C-B	586	0.199	0.199	-	-

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
2-2	B-A	527	0.080	0.202	0.127	0.289
2-2	B-C	679	0.087	0.219	-	-
2-2	C-B	626	0.202	0.202	-	-

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.

Lanes

Junction	Arm	Lane level	Lane	Destination arms	Has limited storage	Storage (PCU)	Min Cap (PCU/hr)	Max Cap (PCU/hr)

1-2	A	1 [Give-way line]	1	B,C	✓	3.00	0	99999
	B	1 [Give-way line]	1	A,C		Infinity	0	99999
	C	1 [Give-way line]	1	A,B		Infinity	0	99999
2-2	A	1 [Give-way line]	1	B,C		Infinity	0	99999
	B	1 [Give-way line]	1	A,C		Infinity	0	99999
	C	1 [Give-way line]	1	A,B	✓	3.00	0	99999

Lane Movements

Junction	Arm	Lane Level	Lane	Destination arm		
				A	B	C
1-2	A	1 [Give-way line]	1		✓	✓
	B	1 [Give-way line]	1	✓		✓
	C	1 [Give-way line]	1	✓	✓	

Lane Movements

Junction	Arm	Lane Level	Lane	Destination arm		
				A	B	C
2-2	A	1 [Give-way line]	1		✓	✓
	B	1 [Give-way line]	1	✓		✓
	C	1 [Give-way line]	1	✓	✓	

Traffic Demand

Demand Set Details

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

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1-2	A	2-2	C	Simple (vertical queueing)	Normal	0	100.00	
2-2	C	1-2	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1-2	A	✓				
	B		ONE HOUR	✓	73	100.000
	C		ONE HOUR	✓	197	100.000
2-2	A		ONE HOUR	✓	83	100.000
	B		ONE HOUR	✓	147	100.000
	C	✓				

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	
Junction 1-2	From	A	0	51	125
		B	40	0	33
		C	149	48	0

Demand (PCU/hr)

		To			
		A	B	C	
Junction 2-2	From	A	0	26	57
		B	28	0	119
		C	78	111	0

Vehicle Mix

HV %s

		To			
		A	B	C	
Junction 1-2	From	A	0	5	5
		B	5	0	5
		C	5	5	0

HV %s

		To			
		A	B	C	
Junction 2-2	From	A	0	5	5
		B	5	0	5
		C	5	5	0

Results

Results Summary for whole modelled period

Junction	Arm	Max delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1-2	A	0.00	0.0	A	162	243
	B	9.34	0.3	A	67	101
	C	2.75	0.1	A	183	275
2-2	A	0.00	0.0	A	75	112
	B	8.86	0.3	A	136	204
	C	5.66	0.4	A	174	261

Main Results for each time segment

07:45 - 08:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	140	35	140	148	0.0	0.0	0.000	A
	B	54	13	53	82	0.0	0.2	7.663	A
	C	157	39	157	121	0.0	0.1	2.268	A
2-2	A	66	16	66	83	0.0	0.0	0.000	A
	B	118	29	116	106	0.0	0.3	7.285	A
	C	148	37	147	140	0.0	0.3	4.541	A

08:00 - 08:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	159	40	159	170	0.0	0.0	0.000	A
	B	67	17	67	89	0.2	0.2	8.900	A
	C	178	45	179	145	0.1	0.1	2.082	A
2-2	A	80	20	80	91	0.0	0.0	0.000	A
	B	127	32	127	126	0.3	0.3	7.468	A
	C	170	43	170	159	0.3	0.2	4.720	A

08:15 - 08:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	191	48	191	203	0.0	0.0	0.000	A
	B	82	21	80	107	0.2	0.3	9.343	A
	C	210	52	209	171	0.1	0.1	2.651	A
2-2	A	87	22	87	109	0.0	0.0	0.000	A
	B	160	40	159	149	0.3	0.3	8.865	A
	C	203	51	202	191	0.2	0.4	5.151	A

08:30 - 08:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	190	47	190	208	0.0	0.0	0.000	A
	B	74	18	75	114	0.3	0.1	9.048	A
	C	226	56	226	167	0.1	0.1	2.750	A
	A	80	20	80	118	0.0	0.0	0.000	A

2-2	B	165	41	164	145	0.3	0.3	8.278	A
	C	208	52	208	190	0.4	0.4	5.665	A

08:45 - 09:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	153	38	153	171	0.0	0.0	0.000	A
	B	67	17	66	91	0.1	0.2	9.308	A
	C	179	45	179	137	0.1	0.0	2.438	A
2-2	A	73	18	73	93	0.0	0.0	0.000	A
	B	130	33	130	125	0.3	0.3	8.004	A
	C	171	43	169	153	0.4	0.3	4.796	A

09:00 - 09:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	140	35	140	143	0.0	0.0	0.000	A
	B	60	15	60	80	0.2	0.2	8.320	A
	C	148	37	149	125	0.0	0.1	2.223	A
2-2	A	61	15	61	85	0.0	0.0	0.000	A
	B	118	30	120	98	0.3	0.2	7.450	A
	C	143	36	142	140	0.3	0.2	4.585	A

Lane Results

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

Lanes: Main Results for each time segment

07:45 - 08:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	Entry	1	1	B,C	140	140	0.0	0.0	0.000	A
		Exit	1	1		148	148	0.0	0.0	0.115	A
	B	Entry	1	1	A,C	54	53	0.0	0.2	7.663	A
		Exit	1	1		82	82	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	157	157	0.0	0.1	2.268	A
		Exit	1	1		121	121	0.0	0.0	0.000	A
2-2	A	Entry	1	1	B,C	66	66	0.0	0.0	0.000	A
		Exit	1	1		83	83	0.0	0.0	0.000	A
	B	Entry	1	1	A,C	118	116	0.0	0.3	7.285	A
		Exit	1	1		106	106	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	148	147	0.0	0.3	4.541	A
		Exit	1	1		140	140	0.0	0.0	0.000	A

08:00 - 08:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	Entry	1	1	B,C	159	159	0.0	0.0	0.000	A
		Exit	1	1		170	170	0.0	0.0	0.179	A
	B	Entry	1	1	A,C	67	67	0.2	0.2	8.900	A
		Exit	1	1		89	89	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	178	179	0.1	0.1	2.082	A
		Exit	1	1		145	145	0.0	0.0	0.000	A
2-2	A	Entry	1	1	B,C	80	80	0.0	0.0	0.000	A
		Exit	1	1		91	91	0.0	0.0	0.000	A
	B	Entry	1	1	A,C	127	127	0.3	0.3	7.468	A
		Exit	1	1		126	126	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	170	170	0.3	0.2	4.720	A
		Exit	1	1		159	159	0.0	0.0	0.000	A

08:15 - 08:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	Entry	1	1	B,C	191	191	0.0	0.0	0.000	A
		Exit	1	1		203	203	0.0	0.0	0.260	A
	B	Entry	1	1	A,C	82	80	0.2	0.3	9.343	A
		Exit	1	1		107	107	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	210	209	0.1	0.1	2.651	A
		Exit	1	1		171	171	0.0	0.0	0.000	A
A	Entry	1	1	B,C	87	87	0.0	0.0	0.000	A	
	Exit	1	1		109	109	0.0	0.0	0.000	A	

2-2	B	Entry	1	1	A,C	160	159	0.3	0.3	8.865	A
		Exit	1	1		149	149	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	203	202	0.2	0.4	5.151	A
		Exit	1	1		191	191	0.0	0.0	0.000	A

08:30 - 08:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	Entry	1	1	B,C	190	190	0.0	0.0	0.000	A
		Exit	1	1		209	208	0.0	0.1	0.385	A
	B	Entry	1	1	A,C	74	75	0.3	0.1	9.048	A
		Exit	1	1		114	114	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	226	226	0.1	0.1	2.750	A
		Exit	1	1		167	167	0.0	0.0	0.000	A
2-2	A	Entry	1	1	B,C	80	80	0.0	0.0	0.000	A
		Exit	1	1		118	118	0.0	0.0	0.000	A
	B	Entry	1	1	A,C	165	164	0.3	0.3	8.278	A
		Exit	1	1		145	145	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	208	208	0.4	0.4	5.665	A
		Exit	1	1		190	190	0.0	0.0	0.000	A

08:45 - 09:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	Entry	1	1	B,C	153	153	0.0	0.0	0.000	A
		Exit	1	1		171	171	0.1	0.0	0.144	A
	B	Entry	1	1	A,C	67	66	0.1	0.2	9.308	A
		Exit	1	1		91	91	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	179	179	0.1	0.0	2.438	A
		Exit	1	1		137	137	0.0	0.0	0.000	A
2-2	A	Entry	1	1	B,C	73	73	0.0	0.0	0.000	A
		Exit	1	1		93	93	0.0	0.0	0.000	A
	B	Entry	1	1	A,C	130	130	0.3	0.3	8.004	A
		Exit	1	1		125	125	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	171	169	0.4	0.3	4.796	A
		Exit	1	1		153	153	0.0	0.0	0.000	A

09:00 - 09:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	Entry	1	1	B,C	140	140	0.0	0.0	0.000	A
		Exit	1	1		143	143	0.0	0.0	0.097	A
	B	Entry	1	1	A,C	60	60	0.2	0.2	8.320	A
		Exit	1	1		80	80	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	148	149	0.0	0.1	2.223	A
		Exit	1	1		125	125	0.0	0.0	0.000	A
2-2	A	Entry	1	1	B,C	61	61	0.0	0.0	0.000	A
		Exit	1	1		85	85	0.0	0.0	0.000	A
	B	Entry	1	1	A,C	118	120	0.3	0.2	7.450	A
		Exit	1	1		98	98	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	143	142	0.3	0.2	4.585	A
		Exit	1	1		140	140	0.0	0.0	0.000	A

2022, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Lane Simulation	A1 - [Lane Simulation]	This analysis set uses Lane Simulation mode. This is provided as an investigative tool and the user should apply judgement when interpreting the results.

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1-2	New St/B1116	T-Junction	Two-way	2.64	A
2-2	Stradbroke Rd/B1116	T-Junction	Two-way	4.52	A

Junction Network Options

Driving side	Lighting
Left	Normal/unknown

Traffic Demand

Demand Set Details

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

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

Linked Arm Data

Junction	Arm	Feeding Junction	Feeding Arm	Link Type	Flow source	Uniform flow (PCU/hr)	Flow multiplier (%)	Internal storage space (PCU)
1-2	A	2-2	C	Simple (vertical queueing)	Normal	0	100.00	
2-2	C	1-2	A	Simple (vertical queueing)	Normal	0	100.00	

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1-2	A	✓				
	B		ONE HOUR	✓	80	100.000
	C		ONE HOUR	✓	176	100.000
2-2	A		ONE HOUR	✓	108	100.000
	B		ONE HOUR	✓	114	100.000
	C	✓				

Origin-Destination Data

Demand (PCU/hr)

		To			
		A	B	C	
Junction 1-2	From	A	0	40	156
		B	30	0	50
		C	135	41	0

Demand (PCU/hr)

		To			
		A	B	C	
Junction 2-2	From	A	0	10	98
		B	16	0	98
		C	67	98	0

Vehicle Mix

HV %s

Junction 1-2

		To		
		A	B	C
From	A	0	5	5
	B	5	0	5
	C	5	5	0

HV %s

Junction 2-2

		To		
		A	B	C
From	A	0	5	5
	B	5	0	5
	C	5	5	0

Results

Results Summary for whole modelled period

Junction	Arm	Max delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1-2	A	0.00	0.0	A	181	272
	B	9.21	0.2	A	73	110
	C	2.63	0.1	A	162	242
2-2	A	0.00	0.0	A	99	149
	B	7.73	0.3	A	106	159
	C	5.25	0.3	A	152	228

Main Results for each time segment

16:45 - 17:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	151	38	151	124	0.0	0.0	0.000	A
	B	62	15	62	64	0.0	0.1	8.388	A
	C	133	33	133	159	0.0	0.0	2.189	A
2-2	A	87	22	87	66	0.0	0.0	0.000	A
	B	86	22	86	81	0.0	0.1	6.749	A
	C	124	31	124	151	0.0	0.2	4.526	A

17:00 - 17:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	178	45	178	150	0.0	0.0	0.000	A
	B	73	18	72	75	0.1	0.2	8.147	A
	C	161	40	160	187	0.0	0.1	2.198	A
2-2	A	95	24	95	71	0.0	0.0	0.000	A
	B	104	26	105	101	0.1	0.1	6.993	A
	C	150	37	150	178	0.2	0.2	5.036	A

17:15 - 17:30

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	209	52	209	176	0.0	0.0	0.000	A
	B	84	21	83	87	0.2	0.2	9.154	A
	C	188	47	188	217	0.1	0.1	2.629	A
2-2	A	117	29	117	92	0.0	0.0	0.000	A
	B	124	31	123	117	0.1	0.3	7.734	A
	C	176	44	178	209	0.2	0.1	5.249	A

17:30 - 17:45

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS

1-2	A	225	56	225	188	0.0	0.0	0.000	A
	B	90	23	91	92	0.2	0.2	9.212	A
	C	196	49	197	233	0.1	0.0	2.455	A
2-2	A	124	31	124	93	0.0	0.0	0.000	A
	B	128	32	126	120	0.3	0.3	7.573	A
	C	188	47	187	225	0.1	0.3	5.002	A

17:45 - 18:00

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	177	44	177	147	0.0	0.0	0.000	A
	B	71	18	70	72	0.2	0.2	8.726	A
	C	155	39	156	183	0.0	0.1	2.466	A
2-2	A	92	23	92	75	0.0	0.0	0.000	A
	B	107	27	108	96	0.3	0.1	7.216	A
	C	147	37	147	177	0.3	0.3	5.183	A

18:00 - 18:15

Junction	Arm	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Throughput (PCU/hr)	Throughput (exit) (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	149	37	149	127	0.0	0.0	0.000	A
	B	60	15	60	59	0.2	0.1	8.388	A
	C	136	34	135	159	0.1	0.1	2.076	A
2-2	A	81	20	81	60	0.0	0.0	0.000	A
	B	87	22	87	87	0.1	0.1	6.626	A
	C	127	32	128	149	0.3	0.1	4.676	A

Lane Results

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

Lanes: Main Results for each time segment

16:45 - 17:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	Entry	1	1	B,C	151	151	0.0	0.0	0.000	A
		Exit	1	1		124	124	0.0	0.0	0.052	A
	B	Entry	1	1	A,C	62	62	0.0	0.1	8.388	A
		Exit	1	1		64	64	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	133	133	0.0	0.0	2.189	A
		Exit	1	1		159	159	0.0	0.0	0.000	A
2-2	A	Entry	1	1	B,C	87	87	0.0	0.0	0.000	A
		Exit	1	1		66	66	0.0	0.0	0.000	A
	B	Entry	1	1	A,C	86	86	0.0	0.1	6.749	A
		Exit	1	1		81	81	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	124	124	0.0	0.2	4.526	A
		Exit	1	1		151	151	0.0	0.0	0.000	A

17:00 - 17:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	Entry	1	1	B,C	178	178	0.0	0.0	0.000	A
		Exit	1	1		149	150	0.0	0.0	0.130	A
	B	Entry	1	1	A,C	73	72	0.1	0.2	8.147	A
		Exit	1	1		75	75	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	161	160	0.0	0.1	2.198	A
		Exit	1	1		187	187	0.0	0.0	0.000	A
2-2	A	Entry	1	1	B,C	95	95	0.0	0.0	0.000	A
		Exit	1	1		71	71	0.0	0.0	0.000	A
	B	Entry	1	1	A,C	104	105	0.1	0.1	6.993	A
		Exit	1	1		101	101	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	150	150	0.2	0.2	5.036	A
		Exit	1	1		178	178	0.0	0.0	0.000	A

17:15 - 17:30

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	Entry	1	1	B,C	209	209	0.0	0.0	0.000	A
		Exit	1	1		176	176	0.0	0.0	0.289	A
	B	Entry	1	1	A,C	84	83	0.2	0.2	9.154	A
		Exit	1	1		87	87	0.0	0.0	0.000	A

	C	Entry	1	1	A,B	188	188	0.1	0.1	2.629	A
		Exit	1	1		217	217	0.0	0.0	0.000	A
2-2	A	Entry	1	1	B,C	117	117	0.0	0.0	0.000	A
		Exit	1	1		92	92	0.0	0.0	0.000	A
	B	Entry	1	1	A,C	124	123	0.1	0.3	7.734	A
		Exit	1	1		117	117	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	176	178	0.2	0.1	5.249	A
		Exit	1	1		209	209	0.0	0.0	0.000	A

17:30 - 17:45

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	Entry	1	1	B,C	225	225	0.0	0.0	0.000	A
		Exit	1	1		188	188	0.0	0.0	0.188	A
	B	Entry	1	1	A,C	90	91	0.2	0.2	9.212	A
		Exit	1	1		92	92	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	196	197	0.1	0.0	2.455	A
		Exit	1	1		233	233	0.0	0.0	0.000	A
2-2	A	Entry	1	1	B,C	124	124	0.0	0.0	0.000	A
		Exit	1	1		93	93	0.0	0.0	0.000	A
	B	Entry	1	1	A,C	128	126	0.3	0.3	7.573	A
		Exit	1	1		120	120	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	188	187	0.1	0.3	5.002	A
		Exit	1	1		225	225	0.0	0.0	0.000	A

17:45 - 18:00

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	Entry	1	1	B,C	177	177	0.0	0.0	0.000	A
		Exit	1	1		146	147	0.0	0.0	0.191	A
	B	Entry	1	1	A,C	71	70	0.2	0.2	8.726	A
		Exit	1	1		72	72	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	155	156	0.0	0.1	2.466	A
		Exit	1	1		183	183	0.0	0.0	0.000	A
2-2	A	Entry	1	1	B,C	92	92	0.0	0.0	0.000	A
		Exit	1	1		75	75	0.0	0.0	0.000	A
	B	Entry	1	1	A,C	107	108	0.3	0.1	7.216	A
		Exit	1	1		96	96	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	147	147	0.3	0.3	5.183	A
		Exit	1	1		177	177	0.0	0.0	0.000	A

18:00 - 18:15

Junction	Arm	Side	Lane level	Lane	Destination arms	Total Demand (PCU/hr)	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	A	Entry	1	1	B,C	149	149	0.0	0.0	0.000	A
		Exit	1	1		127	127	0.0	0.0	0.095	A
	B	Entry	1	1	A,C	60	60	0.2	0.1	8.388	A
		Exit	1	1		59	59	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	136	135	0.1	0.1	2.076	A
		Exit	1	1		159	159	0.0	0.0	0.000	A
2-2	A	Entry	1	1	B,C	81	81	0.0	0.0	0.000	A
		Exit	1	1		60	60	0.0	0.0	0.000	A
	B	Entry	1	1	A,C	87	87	0.1	0.1	6.626	A
		Exit	1	1		87	87	0.0	0.0	0.000	A
	C	Entry	1	1	A,B	127	128	0.3	0.1	4.676	A
		Exit	1	1		149	149	0.0	0.0	0.000	A

Junctions 9
PICADY 9 - Priority Intersection Module
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Filename: B1123 and Craffield Road junctions.j9

Path: W:\2.0 NEW PROJECTS\2016\P16-1151 Fressingfield Sites\Cumulative Assessment

Report generation date: 10-Oct-17 2:50:08 PM

»2022, AM

»2022, PM

Summary of junction performance

	AM							PM						
	Q (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap	Q (PCU)	Delay (s)	RFC	LOS	Junction Delay (s)	Junction LOS	Res Cap
	2022													
Junction 1-2 - Stream B-ACD	0.2	9.90	0.16	A	1.75	A	185 % [Junction 1-2 - Stream B-ACD]	0.3	11.14	0.21	B	1.99	A	123 % [Junction 1-2 - Stream B-ACD]
Junction 1-2 - Stream A-BCD	0.1	5.51	0.04	A				0.1	5.26	0.06	A			
Junction 1-2 - Stream D-ABC	0.0	6.53	0.03	A				0.1	7.05	0.05	A			
Junction 1-2 - Stream C-ABD	0.0	0.00	0.00	A				0.0	0.00	0.00	A			
Junction 2-2 - Stream B-AC	0.1	7.58	0.10	A	1.15	A		0.1	7.57	0.07	A	1.06	A	
Junction 2-2 - Stream C-AB	0.0	5.83	0.02	A				0.1	5.91	0.05	A			

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

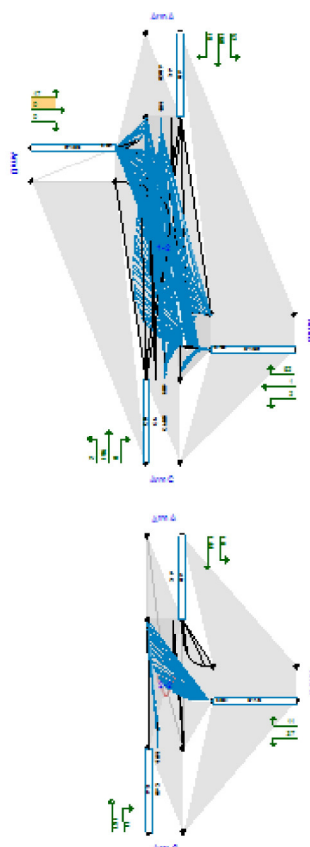
File summary

File Description

Title	Fressingfield Cumulative Assessment
Location	
Site number	
Date	09-Oct-17
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	MDA
Description	

Units

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



Flows show original traffic demand (PCU/h)
Streams (downstream end) show RFC ()

The junction diagram reflects the last run of Junctions.

Analysis Options

Vehicle length (m)	Calculate Q Percentiles	Calculate detailed queueing delay	Calculate residual capacity	Residual capacity criteria type	RFC Threshold	Av. Delay threshold (s)	Q threshold (PCU)
5.75			✓	Delay	0.85	36.00	20.00

Demand Set Summary

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

Analysis Set Details

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

2022, AM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1-2	B1123/B1116	Right-Left Stagger	Two-way	1.75	A
2-2	Cratfield Rd/B1116	T-Junction	Two-way	1.15	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	185	Junction 1-2 - Stream B-ACD

Arms

Arms

Junction	Arm	Name	Description	Arm type
1-2	A	B1116 (N)		Major
	B	B1123		Minor
	C	B1116 (S)		Major
	D	"Wingfield"		Minor
2-2	A	B1116 (N)		Major
	B	Cratfield Rd		Minor
	C	B1116 (S)		Major

Major Arm Geometry

Junction	Arm	Width of carriageway (m)	Has kerbed central reserve	Has right turn bay	Visibility for right turn (m)	Blocks?	Blocking queue (PCU)
1-2	A	7.00			120.0	✓	0.00
	C	7.00			120.0	✓	0.00
2-2	C	7.00			45.0	✓	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

Junction	Arm	Minor arm type	Lane width (m)	Visibility to left (m)	Visibility to right (m)
1-2	B	One lane	3.25	47	44
	D	One lane	2.90	39	81
2-2	B	One lane	2.90	74	26

Slope / Intercept / Capacity

Priority Intersection Slopes and Intercepts

Junction	Stream	Intercept (PCU/hr)	Slope for A-B	Slope for A-C	Slope for A-D	Slope for B-A	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-B	Slope for D-C
1-2	A-D	643	-	-	-	0.238	0.238	0.238	-	0.238	-	-
1-2	B-AD	528	0.092	0.232	-	-	-	0.146	0.332	0.146	0.092	0.232
1-2	B-C	668	0.098	0.248	-	-	-	-	-	-	0.098	0.248
1-2	C-B	643	0.238	0.238	-	-	-	-	-	-	0.238	0.238
1-2	D-A	668	-	-	-	0.248	0.098	0.248	-	0.098	-	-
1-2	D-BC	525	0.145	0.145	0.330	0.231	0.091	0.231	-	0.091	-	-

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
2-2	B-A	509	0.089	0.224	0.141	0.320
2-2	B-C	634	0.093	0.235	-	-
2-2	C-B	600	0.222	0.222	-	-

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 Demand

Demand Set Details

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

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1-2	A		ONE HOUR	✓	230	100.000
	B		ONE HOUR	✓	65	100.000
	C		ONE HOUR	✓	198	100.000
	D		ONE HOUR	✓	17	100.000
2-2	A		ONE HOUR	✓	162	100.000
	B		ONE HOUR	✓	48	100.000
	C		ONE HOUR	✓	178	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A	B	C	D	
Junction 1-2	From	A	0	52	160	18
		B	62	0	2	1
		C	196	0	0	2
		D	17	0	0	0

Demand (PCU/hr)

		To			
		A	B	C	
Junction 2-2	From	A	0	18	144
		B	11	0	37
		C	167	11	0

Vehicle Mix

HV %s

		To				
		A	B	C	D	
Junction 1-2	From	A	0	5	5	5
		B	5	0	5	5
		C	5	5	0	5
		D	5	5	5	0

HV %s

		To			
		A	B	C	
Junction 2-2	From	A	0	5	5
		B	5	0	5
		C	5	5	0

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
	B-ACD	0.16	9.90	0.2	A	60	89
	A-BCD	0.04	5.51	0.1	A	23	34

1-2	A-B					46	69
	A-C					142	213
	D-ABC	0.03	6.53	0.0	A	16	23
	C-ABD	0.00	0.00	0.0	A	0	0
	C-D					2	3
	C-A					180	270
2-2	B-AC	0.10	7.58	0.1	A	44	66
	C-AB	0.02	5.83	0.0	A	13	20
	C-A					150	225
	A-B					17	25
	A-C					132	198

Main Results for each time segment

07:45 - 08:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	B-ACD	49	12	478	0.102	48	0.0	0.1	8.793	A
	A-BCD	18	4	703	0.025	17	0.0	0.0	5.511	A
	A-B	38	10			38				
	A-C	117	29			117				
	D-ABC	13	3	620	0.021	13	0.0	0.0	6.228	A
	C-ABD	0	0	605	0.000	0	0.0	0.0	0.000	A
	C-D	2	0.38			2				
	C-A	148	37			148				
2-2	B-AC	36	9	567	0.064	36	0.0	0.1	7.115	A
	C-AB	10	3	659	0.016	10	0.0	0.0	5.829	A
	C-A	124	31			124				
	A-B	14	3			14				
	A-C	108	27			108				

08:00 - 08:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	B-ACD	58	15	468	0.125	58	0.1	0.1	9.233	A
	A-BCD	22	6	716	0.031	22	0.0	0.0	5.448	A
	A-B	45	11			45				
	A-C	139	35			139				
	D-ABC	15	4	610	0.025	15	0.0	0.0	6.353	A
	C-ABD	0	0	598	0.000	0	0.0	0.0	0.000	A
	C-D	2	0.45			2				
	C-A	176	44			176				
2-2	B-AC	43	11	560	0.077	43	0.1	0.1	7.308	A
	C-AB	13	3	670	0.019	13	0.0	0.0	5.746	A
	C-A	147	37			147				
	A-B	16	4			16				
	A-C	129	32			129				

08:15 - 08:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	B-ACD	72	18	453	0.158	71	0.1	0.2	9.892	A
	A-BCD	29	7	734	0.040	29	0.0	0.1	5.364	A
	A-B	55	14			55				
	A-C	169	42			169				
	D-ABC	19	5	597	0.031	19	0.0	0.0	6.534	A
	C-ABD	0	0	588	0.000	0	0.0	0.0	0.000	A
	C-D	2	0.55			2				
	C-A	216	54			216				
2-2	B-AC	53	13	551	0.096	53	0.1	0.1	7.584	A
	C-AB	17	4	687	0.024	17	0.0	0.0	5.637	A
	C-A	179	45			179				
	A-B	20	5			20				
	A-C	159	40			159				

08:30 - 08:45

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Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	B-ACD	72	18	453	0.158	72	0.2	0.2	9.902	A
	A-BCD	29	7	734	0.040	29	0.1	0.1	5.365	A
	A-B	55	14			55				
	A-C	169	42			169				
	D-ABC	19	5	597	0.031	19	0.0	0.0	6.534	A
	C-ABD	0	0	588	0.000	0	0.0	0.0	0.000	A
	C-D	2	0.55			2				
	C-A	216	54			216				
2-2	B-AC	53	13	551	0.096	53	0.1	0.1	7.584	A
	C-AB	17	4	687	0.024	17	0.0	0.0	5.637	A
	C-A	179	45			179				
	A-B	20	5			20				
	A-C	159	40			159				

08:45 - 09:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	B-ACD	58	15	468	0.125	59	0.2	0.2	9.247	A
	A-BCD	22	6	716	0.031	22	0.1	0.0	5.452	A
	A-B	45	11			45				
	A-C	139	35			139				
	D-ABC	15	4	610	0.025	15	0.0	0.0	6.355	A
	C-ABD	0	0	598	0.000	0	0.0	0.0	0.000	A
	C-D	2	0.45			2				
	C-A	176	44			176				
2-2	B-AC	43	11	560	0.077	43	0.1	0.1	7.311	A
	C-AB	13	3	670	0.019	13	0.0	0.0	5.747	A
	C-A	147	37			147				
	A-B	16	4			16				
	A-C	129	32			129				

09:00 - 09:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	B-ACD	49	12	478	0.102	49	0.2	0.1	8.819	A
	A-BCD	18	4	703	0.025	18	0.0	0.0	5.513	A
	A-B	38	10			38				
	A-C	117	29			117				
	D-ABC	13	3	619	0.021	13	0.0	0.0	6.230	A
	C-ABD	0	0	605	0.000	0	0.0	0.0	0.000	A
	C-D	2	0.38			2				
	C-A	148	37			148				
2-2	B-AC	36	9	567	0.064	36	0.1	0.1	7.123	A
	C-AB	10	3	659	0.016	10	0.0	0.0	5.829	A
	C-A	124	31			124				
	A-B	14	3			14				
	A-C	108	27			108				

2022, PM

Data Errors and Warnings

No errors or warnings

Junction Network

Junctions

Junction	Name	Junction Type	Major road direction	Junction Delay (s)	Junction LOS
1-2	B1123/B1116	Right-Left Stagger	Two-way	1.99	A
2-2	Cratfield Rd/B1116	T-Junction	Two-way	1.06	A

Junction Network Options

Driving side	Lighting	Res Cap (%)	First arm reaching threshold
Left	Normal/unknown	123	Junction 1-2 - Stream B-ACD

Traffic Demand

Demand Set Details

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

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

Demand overview (Traffic)

Junction	Arm	Linked arm	Profile type	Use O-D data	Av. Demand (PCU/hr)	Scaling Factor (%)
1-2	A		ONE HOUR	✓	330	100.000
	B		ONE HOUR	✓	83	100.000
	C		ONE HOUR	✓	216	100.000
	D		ONE HOUR	✓	25	100.000
2-2	A		ONE HOUR	✓	187	100.000
	B		ONE HOUR	✓	35	100.000
	C		ONE HOUR	✓	206	100.000

Origin-Destination Data

Demand (PCU/hr)

		To				
		A	B	C	D	
Junction 1-2	From	A	0	96	210	24
		B	82	0	1	0
		C	216	0	0	0
		D	23	2	0	0

Demand (PCU/hr)

		To			
		A	B	C	
Junction 2-2	From	A	0	22	165
		B	9	0	26
		C	182	24	0

Vehicle Mix

HV %s

		To				
		A	B	C	D	
Junction 1-2	From	A	0	5	5	5
		B	5	0	5	5

	C	5	5	0	5
	D	5	5	5	0

HV %s

Junction 2-2

		To		
From	A	0	5	5
	B	5	0	5
	C	5	5	5

Results

Results Summary for whole modelled period

Junction	Stream	Max RFC	Max delay (s)	Max Q (PCU)	Max LOS	Av. Demand (PCU/hr)	Total Junction Arrivals (PCU)
1-2	B-ACD	0.21	11.14	0.3	B	76	114
	A-BCD	0.06	5.26	0.1	A	35	53
	A-B					84	126
	A-C					184	275
	D-ABC	0.05	7.05	0.1	A	23	34
	C-ABD	0.00	0.00	0.0	A	0	0
	C-D					0	0
	C-A					198	297
2-2	B-AC	0.07	7.57	0.1	A	32	48
	C-AB	0.05	5.91	0.1	A	30	44
	C-A					159	239
	A-B					20	30
	A-C					151	227

Main Results for each time segment

16:45 - 17:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	B-ACD	62	16	462	0.135	62	0.0	0.2	9.438	A
	A-BCD	26	7	745	0.035	26	0.0	0.0	5.257	A
	A-B	70	17			70				
	A-C	153	38			153				
	D-ABC	19	5	593	0.032	19	0.0	0.0	6.582	A
	C-ABD	0	0	588	0.000	0	0.0	0.0	0.000	A
	C-D	0	0			0				
	C-A	163	41			163				
2-2	B-AC	26	7	556	0.047	26	0.0	0.1	7.127	A
	C-AB	23	6	662	0.034	23	0.0	0.0	5.906	A
	C-A	132	33			132				
	A-B	17	4			17				
	A-C	124	31			124				

17:00 - 17:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	B-ACD	75	19	449	0.166	74	0.2	0.2	10.095	B
	A-BCD	34	8	766	0.044	34	0.0	0.1	5.161	A
	A-B	82	21			82				
	A-C	180	45			180				
	D-ABC	22	6	581	0.039	22	0.0	0.0	6.770	A
	C-ABD	0	0	577	0.000	0	0.0	0.0	0.000	A
	C-D	0	0			0				
	C-A	194	49			194				
2-2	B-AC	31	8	549	0.057	31	0.1	0.1	7.308	A
	C-AB	29	7	675	0.042	28	0.0	0.1	5.847	A
	C-A	157	39			157				
	A-B	20	5			20				

	A-C	148	37			148				
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17:15 - 17:30

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	B-ACD	91	23	431	0.212	91	0.2	0.3	11.125	B
	A-BCD	46	11	796	0.058	46	0.1	0.1	5.039	A
	A-B	100	25			100				
	A-C	218	54			218				
	D-ABC	28	7	564	0.049	27	0.0	0.1	7.045	A
	C-ABD	0	0	563	0.000	0	0.0	0.0	0.000	A
	C-D	0	0			0				
	C-A	238	59			238				
2-2	B-AC	39	10	538	0.072	38	0.1	0.1	7.572	A
	C-AB	37	9	693	0.054	37	0.1	0.1	5.764	A
	C-A	190	47			190				
	A-B	24	6			24				
	A-C	182	45			182				

17:30 - 17:45

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	B-ACD	91	23	431	0.212	91	0.3	0.3	11.143	B
	A-BCD	46	11	796	0.058	46	0.1	0.1	5.039	A
	A-B	100	25			100				
	A-C	218	54			218				
	D-ABC	28	7	564	0.049	28	0.1	0.1	7.046	A
	C-ABD	0	0	563	0.000	0	0.0	0.0	0.000	A
	C-D	0	0			0				
	C-A	238	59			238				
2-2	B-AC	39	10	538	0.072	39	0.1	0.1	7.572	A
	C-AB	37	9	693	0.054	37	0.1	0.1	5.768	A
	C-A	190	47			190				
	A-B	24	6			24				
	A-C	182	45			182				

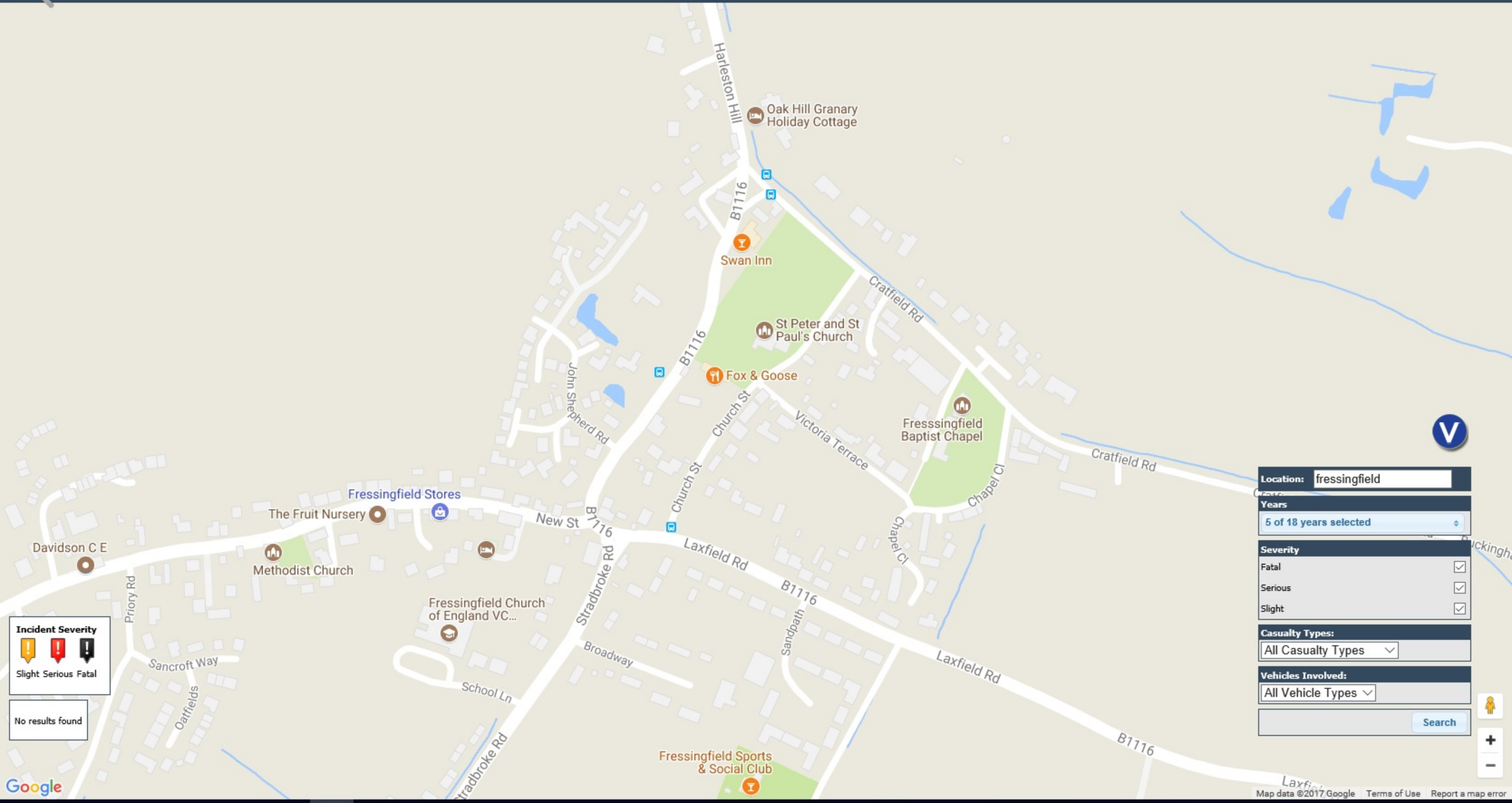
17:45 - 18:00

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	B-ACD	75	19	449	0.166	75	0.3	0.2	10.123	B
	A-BCD	34	8	766	0.044	34	0.1	0.1	5.164	A
	A-B	82	21			82				
	A-C	180	45			180				
	D-ABC	22	6	581	0.039	23	0.1	0.0	6.773	A
	C-ABD	0	0	577	0.000	0	0.0	0.0	0.000	A
	C-D	0	0			0				
	C-A	194	49			194				
2-2	B-AC	31	8	549	0.057	32	0.1	0.1	7.313	A
	C-AB	29	7	675	0.042	29	0.1	0.1	5.848	A
	C-A	157	39			157				
	A-B	20	5			20				
	A-C	148	37			148				

18:00 - 18:15

Junction	Stream	Total Demand (PCU/hr)	Junction Arrivals (PCU)	Capacity (PCU/hr)	RFC	Throughput (PCU/hr)	Start queue (PCU)	End queue (PCU)	Delay (s)	LOS
1-2	B-ACD	62	16	462	0.135	63	0.2	0.2	9.479	A
	A-BCD	26	7	745	0.035	26	0.1	0.1	5.264	A
	A-B	70	17			70				
	A-C	152	38			152				
	D-ABC	19	5	593	0.032	19	0.0	0.0	6.590	A
	C-ABD	0	0	588	0.000	0	0.0	0.0	0.000	A
	C-D	0	0			0				
	C-A	163	41			163				
2-2	B-AC	26	7	556	0.047	26	0.1	0.1	7.133	A
	C-AB	23	6	662	0.034	23	0.1	0.0	5.913	A
	C-A	132	33			132				
	A-B	17	4			17				
	A-C	124	31			124				

ENCLOSURE 5



Location:

Years
5 of 18 years selected

Severity
 Fatal
 Serious
 Slight

Casualty Types:

Vehicles Involved:

Incident Severity

Slight Serious Fatal

No results found



Incident Severity





Slight Serious Fatal

4 results found

Location:

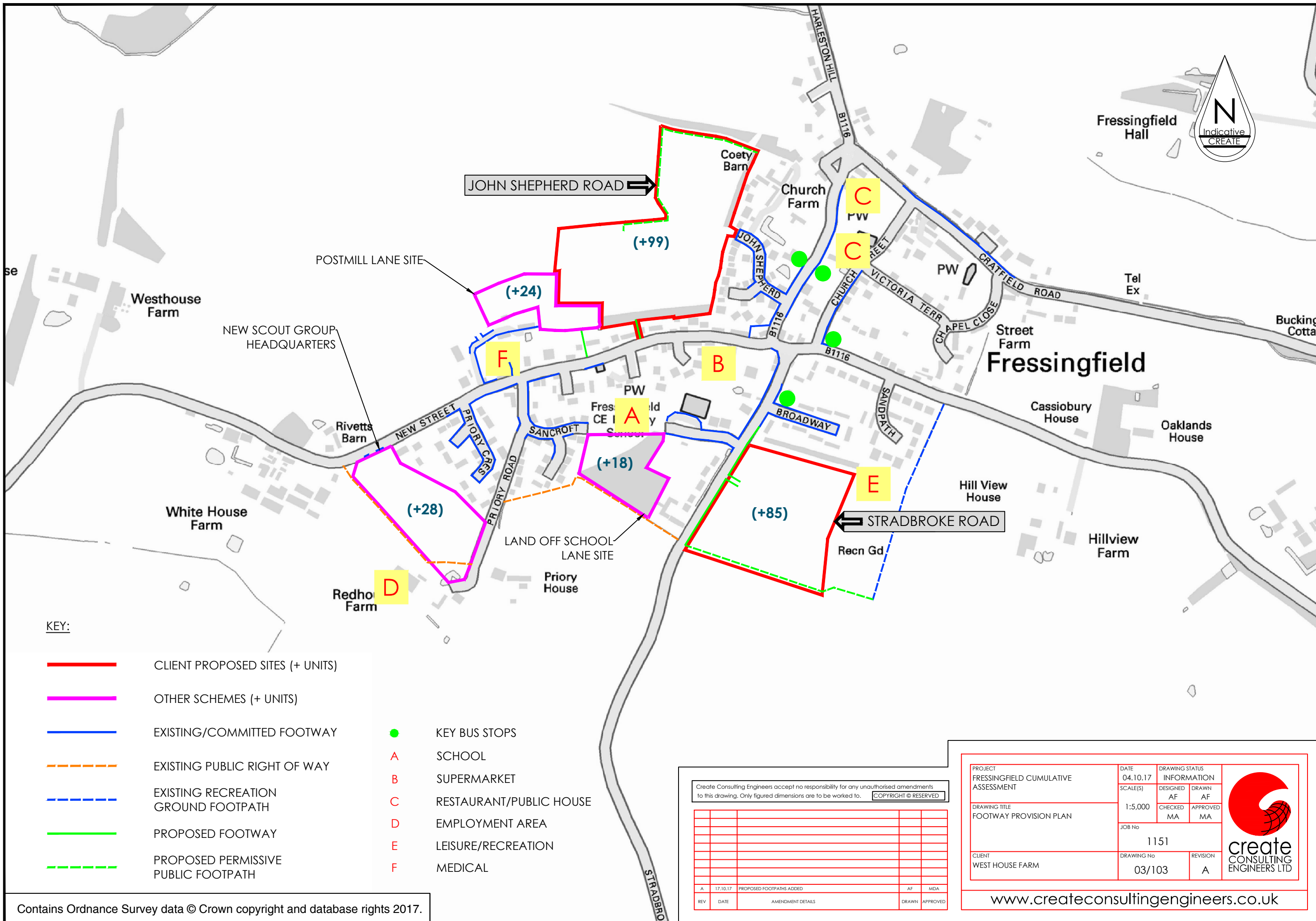
Years
5 of 18 years selected

Severity
 Fatal
 Serious
 Slight

Casualty Types:

Vehicles Involved:

ENCLOSURE 6



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ORIGINAL SHEET SIZE - A3 Landscape

DO NOT SCALE