

# Staplehurst, Maidstone

Technical Note: Junction capacity assessment  
results

June 2015

Maidstone Borough Council



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results

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Maidstone Borough Council

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# 1 Introduction

In January 2015, Maidstone Borough Council (MBC) commissioned Mott MacDonald to undertake junction assessments at two locations in Staplehurst; A229 Station Road / Station Approach / Market Street cross roads, a priority junction, and Station Road / Headcorn Road / High Street / Marden Road, a signalised junction. The results were issued to MBC in a Technical Note, document reference 347826-TPN-ITD-002. MBC considered that with the Local Plan being in draft format, there was uncertainty over which developments were confirmed allocated and which ones were still aspirational. MBC confirmed the use of Temprow to predict likely growth in traffic to the future year, 2031. However, they considered the Temprow growth to be on the low side, potentially underestimating future traffic generation. To account for the shortfall, based on predicted housing stock in Maidstone, growth was uplifted by 6%, on top of the Temprow growth rate.

In March 2015, MBC commissioned Mott MacDonald to re-assess the same two junctions using the draft Local Plan allocations rather than generic growth to carry out the junction capacity assessments. As the Local Plan is draft, MBC supplied the development sites that needed to be accounted for in the junction capacity models, including development name, size and whether there was a Transport Assessment associated with the scheme (i.e. the site had been through the planning process).

This document, referred to as a Technical Note, summarises the results of the assessments.

The Technical Note will be structured as follows:

**Section 2** describes the methodology and data used and input assumptions for calculating 2014 and 2031 traffic flows

**Section 3** summarise the results of the junction capacity analysis, along with any recommended mitigation measures



## 2 Data

### 2.1 Background

As part of the agreed scope of work, MBC provided all the information required to carry out the two junction assessments. The information supplied was checked by Mott MacDonald for completeness, with any assumptions agreed by MBC. **Section 2.2** and **Section 2.3** set out the information and assumptions for each junction.

### 2.2 Existing Traffic information

#### 2.2.1 A229 Station Road / Station Approach / Market Street

In order to calculate traffic flows for 2014 (the agreed existing year), the following Transport Assessment was supplied:

- 'Proposed Sainsbury's Store Station Approach, Staplehurst, Transport Assessment - Transport Assessment produced by Mayer Brown, November 2011 (Planning reference: 11/1944)

Flows in passenger car units (PCUs) were calculated using the raw survey data contained in Appendix C of the supplied Transport Assessment. Two surveys were carried out on Friday 20<sup>th</sup> May and Saturday 21<sup>st</sup> May 2011. The flows were uplifted to 2014.

The Transport Assessment supplied by MBC was for a Sainsbury's superstore; with the peak hours stated as being a Friday afternoon and Saturday. These are not considered typical peak hours for other land uses, such as residential or office employment. MBC confirmed that they did not have any other traffic flows for this junction. In the absence of a 'typical' weekday, that being a Tuesday, Wednesday or Thursday, link flows from the Station Road / Headcorn Road / High Street / Marden Road junction were used and traffic turning movements were reversed to calculate and interpolate an AM peak hour. The flows were then issued to MBC for review and subsequently agreed for use. **Appendix A** shows the flow diagram for this peak hour.

The 2014 flows were further uplifted, using Temprow and adjusted using the National Traffic Model (NTM), to predict future background traffic flows. This formed the 2031 scenario, the agreed future year.

#### 2.2.2 Station Road / Headcorn Road / High Street / Marden Road

In order to calculate traffic flows for 2014, the following Transport Assessment was supplied:

- 'Land off Headcorn Road, Staplehurst, prepared for Bovis Homes Limited – Transport Assessment produced by Stuart Michael Associates Limited, May 2014 (Planning reference: 14/505432)

Flows in passenger car units (PCUs) were calculated using the raw survey data contained in Appendix 2 of the supplied Transport Assessment. The survey was carried out on Tuesday 6<sup>th</sup> March 2012. The flows were uplifted to 2014.

The 2014 flows were further uplifted, using Temprow and adjusted using the National Traffic Model (NTM), to predict future background traffic flows. This formed the 2031 scenario.

### 2.3 Development traffic information

The MBC Local Plan is at its draft stage, with no confirmation over what sites are definitely allocated for development and what sites are aspirational.

However, MBC require that the junctions in the future year are assessed based on the draft Local Plan, so the potential impact of the various sites on the two junctions can be assessed. In the absence of confirmed data in the Local Plan, MBC issued a list of development sites they consider as having an impact on the two junctions to be assessed.

MBC provided Transport Assessments which contained information on land use, trip generation and trip distribution for some of the proposed developments (in relation to the junctions being assessed as part of the proposed development in each Transport Assessment). For some of the developments, no Transport Assessments have been carried out yet. Assumptions had to be made for the latter and these were agreed with MBC.

#### 2.3.1 Trip generation

Where a Transport Assessment contained the number of arrivals and departures during the AM and PM weekday peak hour, this was used for the corresponding development. Where no Transport Assessment associated with a listed scheme had been completed, i.e. proposed or aspirational development yet to go through planning, a comparable trip rate was used. This was based on location and generating a worst case scenario. The rates used were agreed with MBC.

#### 2.3.2 Trip distribution

In order to determine traffic distribution associated with all listed sites, two approaches were adopted.

1. Supplied Transport Assessments focused on junctions which that specific development would affect. The Transport Assessments did not necessarily contain distribution information for the two junctions this Technical Note looks at. If it did, the information was directly applied to the junction(s). If the proposed development, as listed by MBC, was on the same road as the development in the Transport Assessment, assumptions were made on likely movement.
2. Where no Transport Assessment had been completed as the development is still speculation or aspirational, i.e. the scheme has not been through planning, the distribution from the most comparable site with a Transport Assessment was used.

A final list of each scheme and its associated trip generation and trip distribution at the two junctions in Staplehurst was submitted to MBC for review and approval.

A list of the developments which MBC wanted accounting for in the junction capacity assessments can be found in **Appendix B**.

## 2.4 Growth

TEMPRO (version 6.2 with planning dataset 62 and NTM dataset AF09) has been interrogated with regards to forecast growth in traffic. The growth rates were adjusted using the NTM for a rural principal road in Staplehurst.

For the A229 Station Road / Station Approach / Market Street junction, growth rates for between 2011 and 2014, and 2014 to 2031 have been generated. **Table 2.1** to **Table 2.3** show the growth rates. There is no growth for AM peak 2011-2014 as there were no flows for 2011 during this peak hour. The 2014 peak hour was interpreted and determined from 2014 flows.

Table 2.1: Tempro growth rates for Staplehurst –2011-2014

Time period	Factor
AM peak	-
PM peak	1.009622513

Table 2.2: Tempro growth rates for Staplehurst –2014-2031

Time period	Factor
AM peak	1.237245722
PM peak	1.251716432

For the Station Road / Headcorn Road / High Street / Marden Road junction, growth rates for between 2012 and 2014, and 2014 to 2031 have been generated for a weekday AM and PM peak. **Table 2.4** to **Table 2.6** show the growth rates.

Table 2.3: Tempro growth rates for Staplehurst –2012-2014

Time period	Factor
AM peak	1.005761004
PM peak	1.006403568

Table 2.4: Tempro growth rates for Staplehurst –2014-2031

Time period	Factor
AM peak	1.237245722
PM peak	1.251716432

## 2.5 Models

MBC provided information, by way of Transport Assessments from their Planning Portal, confirming that the models contained in the supplied Transport Assessments can be used and replicated for this work. The models used are the same as those models used in the previous work.

## 3 Junction Capacity Analysis

### 3.1 Introduction

Junction capacity analysis has been carried out at two junctions:

- A229 Station Road / Station Approach / Market Street.
- Station Road / Headcorn Road / High Street / Marden Road; and

MBC agreed on the assessment years, which are 2014 and 2031, for both the AM and PM peak hour.

Two software packages have been used to assess the capacity and operation of the junctions. Picady (Junctions8) for the A229 Station Road / Station Approach / Market Street priority junction and LinSig (version 3) for the Station Road / Headcorn Road / High Street / Marden Road signalised junction.

Picady calculates a ratio of flow to capacity (RFC), estimated maximum queuing, and delay (in seconds). An RFC of 0.85 or below is the desirable threshold, but a junction would be considered to operate adequately between an RFC of 0.85 and 1.00. Any RFC values exceeding 1.00 indicate the junction would operate over maximum capacity and would become saturated with queuing concerns.

LinSig software has been used to model the signal controlled junction. Output from LinSig refers to Degree of Saturation % (DoS%, which is equivalent to RFC for roundabouts) as the primary measure of performance. A DoS of below 90% suggests a junction will operate within capacity. A DoS of 90% to 100% suggests a junction is over desired capacity but within its theoretical capacity, whilst a DoS in excess of 100% suggests a junction will be in excess of theoretical capacity.

If any modelling results exceed theoretical capacity; that being a RFC of 1.00 or DoS of 100%, the junction capacity assessment has been re-run with proposed mitigation measures. Any improvements are model specific, and not based on engineering design standards, i.e. the mitigation has been applied within the model only. Appropriate technical layouts would have to take into consideration the model parameters.

### 3.2 A229 Station Road / Station Approach / Market Street

**Table 3.1**, overleaf, summarises the modelling results for the existing 2014 scenario.

Table 3.1: Picady results – existing 2014

Arm	AM peak			PM peak		
	RFC	Maximum queue (PCU)	Delay (s)	RFC	Maximum queue (PCU)	Delay (s)
Market Street, left and ahead	0.03	0	8	0.02	0	8
Market Street, right and ahead	0.03	0	15	0.01	0	15
A229 Station Road north, right	0.23	0	9	0.06	0	7
Station Approach, left and ahead	0.08	0	8	0.25	0	10
Station Approach, right and ahead	0.25	0	15	0.43	1	17
A229 Station Road south, left, ahead, right	0.03	0	4	0.03	0	5

The modelling indicates that the junction operated within capacity in 2014.

**Table 3.2** summarises the modelling results for the Base 2031 scenario. This is predicted background traffic growth for 2031 without any development traffic applied.

Table 3.2: Picady results – Base 2031

Arm	AM peak			PM peak		
	RFC	Maximum queue (PCU)	Delay (s)	RFC	Maximum queue (PCU)	Delay (s)
Market Street, left and ahead	0.04	0	8	0.03	0	8
Market Street, right and ahead	0.04	0	19	0.02	0	19
A229 Station Road north, right	0.32	1	10	0.08	0	7
Station Approach, left and ahead	0.11	0	9	0.39	1	15
Station Approach, right and ahead	0.39	1	23	0.62	2	30
A229 Station Road south, left, ahead, right	0.04	0	4	0.05	0	5

The modelling predicts that the junction would operate within capacity in 2031, with minimal queuing and congestion. The maximum RFC in the AM peak is modelled as 0.39 with a queue of one and delay of 23 seconds. This is on Station Approach turning right and ahead. The same movements have the highest RFC in the PM peak, with an RFC of 0.62, a queue of two PCUs and a delay of 30 seconds.

**Table 3.3** summarises the modelling results for the Design 2031 scenario. This is predicted background traffic growth for 2031 with development traffic applied.

Table 3.3: Picady results – Design 2031

Arm	AM peak			PM peak		
	RFC	Maximum queue (PCU)	Delay (s)	RFC	Maximum queue (PCU)	Delay (s)
Market Street, left and ahead	0.04	0	8	0.03	0	9
Market Street, right and ahead	0.05	0	26	0.03	0	26
A229 Station Road north, right	0.61	2	20	0.13	0	8
Station Approach, left and ahead	0.24	0	14	<b>1.01</b>	<b>12</b>	<b>157</b>
Station Approach, right and ahead	0.65	2	59	1.00	11	164
A229 Station Road south, left, ahead, right	0.05	0	4	0.05	0	5

The modelling predicts that the junction would exceed capacity on one arm in the PM peak. In 2031, with all designated development flows applied, the Station Approach arm would exceed design capacity by 0.01. The model shows that a queue of 12 PCUs and delay of 157 seconds (2 minutes 37 seconds) would form on this arm. Looking at the modelling results in more detail, this is a peak within a peak, so the worst performing 15 minutes in the PM peak hour. The preceding 15 minutes shows a maximum RFC of 1.00, and associated queue of eight PCUs and a delay of 93 seconds (1 minute 33 seconds). The 15 minutes following the peak within the peak shows a maximum RFC of 0.65, queue of two PCUs and delay of 67 seconds (1 minute 7 seconds). This shows that queuing and delays dissipate within 15 minutes of the peak delay.

Despite the above representing a peak within a peak, this movement still exceeds design capacity. Due to drivers having to wait and give way, there is the potential of possible safety issues. Drivers waiting to exit the junction may carry out inappropriate manoeuvres to avoid waiting. An alternative junction form, such as a signalised junction, may be considered as it could combat such manoeuvres as traffic on all arms would be controlled.

### 3.3 Station Road / Headcorn Road / High Street / Marden Road

Table 3.4 summarises the results for the 2014 scenario, which indicates that the junction operated without any queuing or delay concerns.

Table 3.4: LinSig results – existing 2014

Movement	AM peak		PM peak	
	DoS	Mean max queue (PCU)	DoS	Mean max queue (PCU)
A229 Station Road, left, ahead, right	58.3%	12	59.6%	13
Headcorn Road, right, ahead, left	63.7%	11	77.2%	13
High Street, ahead, right, left	81.2%	21	78.2%	19
Marden Road, left, ahead, right	71.8%	13	79.5%	11

A DoS of below 90% suggests a junction will operate within desirable capacity; this is the case for the 2014 scenario. The highest mean max queue in the AM was recorded on the High Street, ahead, right, left, with 21 PCUs. During the PM peak, the highest mean max queue was recorded on High Street, ahead, right, left, with 19 PCUs.

**Table 3.5** summarises the modelling results for the future 2031 scenario. This is predicted background traffic growth for 2031 without any development traffic applied.

Table 3.5: LinSig results – Base 2031

Movement	AM peak		PM peak	
	DoS	Mean max queue (PCU)	DoS	Mean max queue (PCU)
A229 Station Road, left, ahead, right	77.8%	16	71.5%	18
Headcorn Road, right, ahead, left	<b>94.7%</b>	<b>17</b>	<b>110.2%</b>	<b>34</b>
High Street, ahead, right, left	<b>99.6%</b>	<b>37</b>	<b>107.0%</b>	<b>62</b>
Marden Road, left, ahead, right	<b>99.5%</b>	<b>22</b>	<b>108.4%</b>	<b>26</b>

When the 2014 flows are uplifted to 2031 the junction is predicted to exceed capacity, as shown in **Table 3.5**, with three approaches becoming saturated during the AM and PM peak hours. The results indicate that the High Street would be the busiest arm, with a 37 PCU and 62 PCU mean max queue in the AM and PM peak respectively.

As the junction becomes saturated and exceeds capacity in Base 2031, i.e. predicted future background traffic, the Design 2031 flows have not been assessed, as the junction will just become more saturated with longer queues and delays.

The LinSig model predicts that the junction would exceed maximum capacity by 2031, with queuing and congestion concerns. In order for the model to operate within capacity, i.e. a DoS below 100%, modifications to the junction model have been made in order to accommodate Design 2031 flows. These changes are:



- Add a flare / lane on Station Road of 46m (to accommodate eight PCUs);
- Add a flare / lane on the High Street of 57.5m (to accommodate 10 PCUs);
- Add a flare / lane on Marden Road of 28.75m (to accommodate five PCUs);
- Add a flare / lane on Headcorn Road of 17.25m (to accommodate three PCUs); and
- Pedestrian coming up every other cycle with two stages for vehicles, right turning vehicles turning in gaps and intergreen on all four approaches. Staging diagrams for the existing layout are shown in **Figure 3.1**, with **Figure 3.2** showing the proposed mitigation.

Figure 3.1: Staging diagram for existing layout

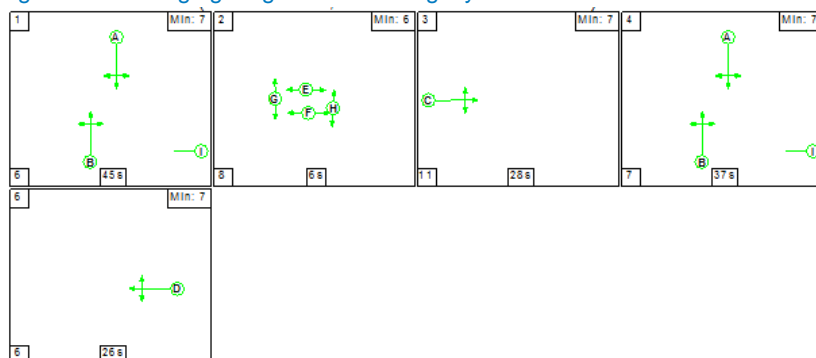
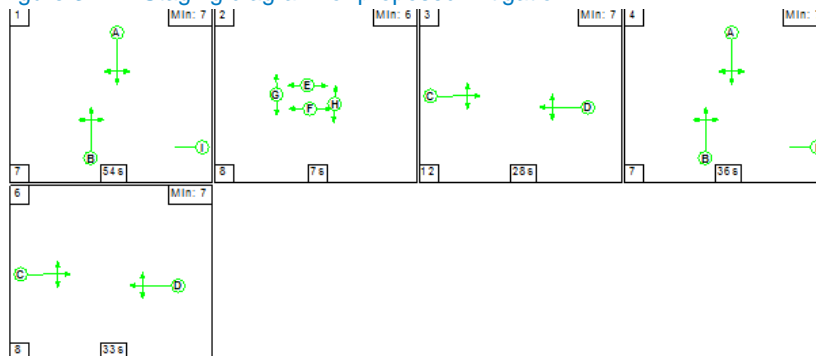


Figure 3.2: Staging diagram for proposed mitigation



**Table 3.6** and **Table 3.7** show the results of these modifications for the Base 2031 and Design 2031 scenarios respectively.

Table 3.6: LinSig results – Base 2031 with proposed mitigation measures

Movement	AM peak		PM peak	
	DoS	Mean max queue (PCU)	DoS	Mean max queue (PCU)
A229 Station Road, left, ahead, right	64.2%	14	79.1%	19
Headcorn Road, right, ahead, left	42.8%	7	44.4%	6
High Street, ahead, right, left	80.6%	21	86.2%	22
Marden Road, left, ahead, right	41.0%	5	29.7%	3

Table 3.7: LinSig results – Design 2031 with proposed mitigation measures

Movement	AM peak		PM peak	
	DoS	Mean max queue (PCU)	DoS	Mean max queue (PCU)
A229 Station Road, left, ahead, right	67.3%	14	85.1%	20
Headcorn Road, right, ahead, left	62.4%	9	76.4%	13
High Street, ahead, right, left	86.8%	23	88.1%	23
Marden Road, left, ahead, right	82.3%	12	89.3%	11

With the proposed modifications, the model predicts that the junction would operate within capacity. The proposed measures ensure the model performs within the critical thresholds, and not whether they are achievable in design or engineering terms.

It should be noted that the mitigation measures are improvements to the existing layout. Alternative layouts have not been considered for this work, i.e. roundabout, and the measures are model specific, not based on engineering design standards, i.e. the mitigation has been applied within the model only. Appropriate technical layouts would have to take into consideration the model parameters, as well as practical measures such as available land and safety.

**Appendix C** contains all of the modelling output files.

## 4 Summary

In summary:

- Traffic data was supplied by MBC by way of Transport Assessments on the MBC Planning Portal;
- MBC confirmed that the junction assessment models and traffic data contained within the supplied Transport Assessments was to be used for the Staplehurst Package assessment work;
- For the priority junction, MBC could only provide traffic data for a Friday PM peak and Saturday peak; not a typical neutral weekday. An AM peak was calculated based on existing information, and agreed for use by MBC;
- MBC confirmed that the Local Plan is still draft but the assessments were to account for development sites and how these sites would affect the two junctions. In the absence of confirmed allocated sites, MBC supplied a list of what developments to account for;
- Information contained within supplied Transport Assessments and assumptions on likely traffic movement was used to determine development trip generation and distribution. The proposed distribution per site was reviewed by MBC and agreed for use;
- The modelling results for the priority junction, A229 Station Road / Station Approach / Market Street shows that the junction operated within capacity in 2014;
- The modelling results for the priority junction, A229 Station Road / Station Approach / Market Street predict that the junction would operate within capacity in Base 2031 but not Design 2031;
- During Design 2031 queue and delay dissipates within the peak hour. The results show the junction reached capacity at 1.01 but this is a peak within a peak, so worst performing 15 minutes within the peak hour. However, by exceeding design threshold there is the possibility that drivers will make inappropriate manoeuvres to exit the junction. Signalising this junction would control traffic flows on all arms;
- The modelling results for the signalised junction at Station Road / Headcorn Road / High Street / Marden Road show that the junction operated within theoretical capacity in 2014;
- The modelling results for the signalised junction at Station Road / Headcorn Road / High Street / Marden Road predict that the junction would exceed capacity in Base and therefore Design 2031. Mitigation measures have been proposed to accommodate the Design 2031 traffic levels for the existing junction layout, i.e. signalised junction. These proposed measures have been entered as model parameters but have not been tested in design terms. Future technical layouts would have to take into consideration these model parameters. Based on these measures, the model predicts the junction would operate within capacity in Design 2031.

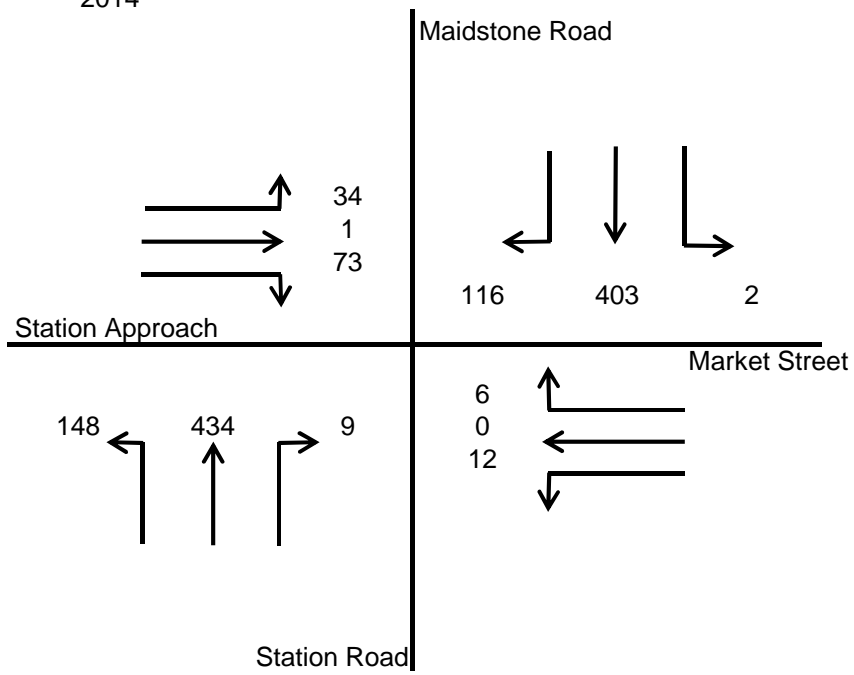
# Appendices

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# Appendix A. AM peak hour traffic flows at A229 Station Road / Station Approach / Market Street

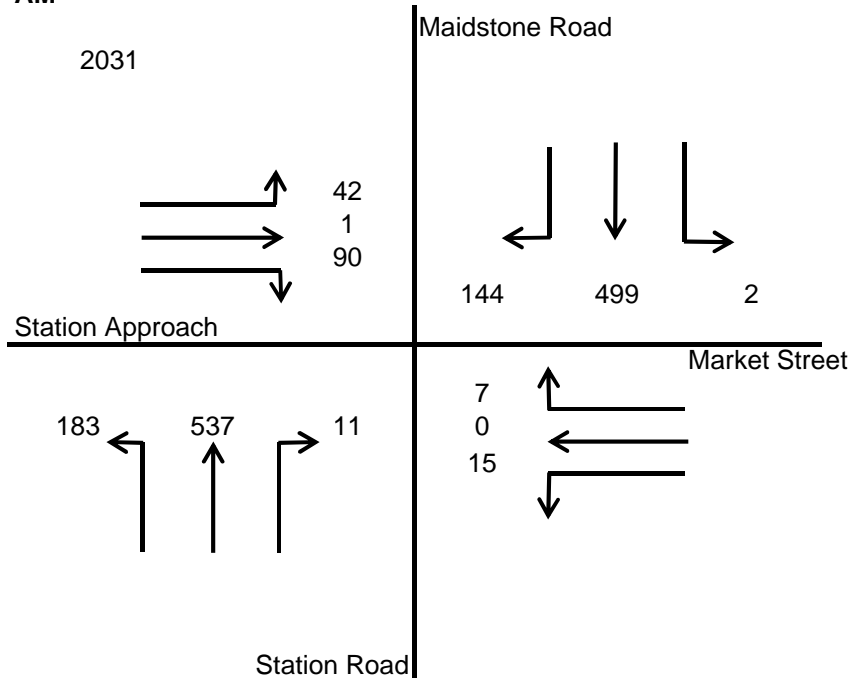
AM

2014



AM

2031



## Appendix B. MBC Development sites



**Staplehurst allocated sites**

Site Address	Grid Ref.	Location type	Application number	Description of development	No. of houses and Mix	Private Dwellings	Affordable Dwellings	Other	Notes		
Hen and Duckhurst Farm Marden Road Staplehurst  <b>POLICY H1 (36)</b>	TQ 77974 43806 E 577974 N 143806	Adjacent to Rural Service Centre	14/502010/OUT	Outline application for the Erection of residential development for 250 dwellings with access and garaging with access considered at this stage and all other matters reserved for future consideration.	250	150 60%	100 40%		Housing mix figures are indicative only TA submitted as part of application		
						<b>INDICATIVE HOUSING MIX</b>					
						House types	Quantity	Units split		Total	
								Priv.		Afford.	
						1-bed drive thru	1	4		37	41
						1-bed house	12				
						1-bed flat type A	14				
						1-bed flat type A	14				
						2-bed drive thru	2	37		34	71
						2-bed FOG	1				
						2-bed bung.	4				
						2-bed house	64				
						3-bed house 2storey	12	53		23	76
						3-bed house 2.5storey	64				
						4-bed type A	11	56		6	62
4-bed type B	13										
4-bed type C	12										
4-bed Type D	7										
4-bed type E	7										
4-bed type F	8										
5-bed type A	4										
	250	150	100	250							

Fishers Farm Fishers Road/Headcorn Road Staplehurst  <b>POLICY H1 (37)</b>	TQ 78912 43831 E 578912 N 143831	Adjacent to Rural Service Centre	14/505432/FULL  <b>Part (approx. 1/3 of allocated site)</b>	Residential development to provide 167 dwellings, areas of public open space, associated landscaping and infrastructure and the formation of new vehicular access from Headcorn Road and pedestrian access from Fisher Road, Fishers Close, Hurst Close and Headcorn Road. Emergency vehicle ingress only from Fishers Road.	167	101	66		TA submitted with application.																																			
					<b>PROPOSED HOUSING MIX</b> <table border="1"> <thead> <tr> <th>House types</th> <th>Private</th> <th>Affordable</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>2-bed house</td> <td>4</td> <td>35</td> <td><b>39</b></td> </tr> <tr> <td>3-bed house</td> <td>59</td> <td>16</td> <td><b>75</b></td> </tr> <tr> <td>3-bed +study house</td> <td>14</td> <td>-</td> <td><b>14</b></td> </tr> <tr> <td>4-bed house</td> <td>20</td> <td>3</td> <td><b>23</b></td> </tr> <tr> <td>5 bed house</td> <td>4</td> <td>-</td> <td><b>4</b></td> </tr> <tr> <td>2-bed flats</td> <td>-</td> <td>11</td> <td><b>11</b></td> </tr> <tr> <td>2-bed FOG</td> <td>-</td> <td>1</td> <td><b>1</b></td> </tr> <tr> <td><b>TOTAL</b></td> <td><b>101</b></td> <td><b>66</b></td> <td><b>167</b></td> </tr> </tbody> </table>				House types	Private	Affordable	TOTAL	2-bed house	4	35	<b>39</b>	3-bed house	59	16	<b>75</b>	3-bed +study house	14	-	<b>14</b>	4-bed house	20	3	<b>23</b>	5 bed house	4	-	<b>4</b>	2-bed flats	-	11	<b>11</b>	2-bed FOG	-	1	<b>1</b>	<b>TOTAL</b>	<b>101</b>	<b>66</b>	<b>167</b>
House types	Private	Affordable	TOTAL																																									
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5 bed house	4	-	<b>4</b>																																									
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2-bed FOG	-	1	<b>1</b>																																									
<b>TOTAL</b>	<b>101</b>	<b>66</b>	<b>167</b>																																									
	TQ79019 43856 E 579019 N 143856	Adjacent to Rural Service Centre	<b>Remaining 2/3 of allocated site</b>	Potential new application for 250 units	250	60%	40%		TA will be submitted as part of the application  John Wilde C & A Consulting Engineers LTD Office 17, Wealden Place, Bradbourne Vale Road, Sevenoaks Kent, TN13 3QQ T : 01732 441769 07887 496661 <a href="mailto:jwilde@c-a.uk.com">jwilde@c-a.uk.com</a>																																			
				<b>INDICATIVE PROPOSED HOUSING MIX</b> <table border="1"> <thead> <tr> <th>House types</th> <th>Private</th> <th>Affordable</th> <th>TOTAL</th> </tr> </thead> <tbody> <tr> <td>1-bed flat</td> <td>-</td> <td>8</td> <td>8</td> </tr> <tr> <td>2-bed flat</td> <td>-</td> <td>12</td> <td>12</td> </tr> <tr> <td>2-bed house</td> <td>-</td> <td>28</td> <td>28</td> </tr> <tr> <td>3-bed house</td> <td>45</td> <td>38</td> <td>83</td> </tr> <tr> <td>4-bed House</td> <td>95</td> <td>14</td> <td>109</td> </tr> <tr> <td>5-bed house</td> <td>10</td> <td>-</td> <td>10</td> </tr> <tr> <td><b>TOTAL</b></td> <td><b>150</b></td> <td><b>100</b></td> <td><b>250</b></td> </tr> </tbody> </table>				House types	Private	Affordable	TOTAL	1-bed flat	-	8	8	2-bed flat	-	12	12	2-bed house	-	28	28	3-bed house	45	38	83	4-bed House	95	14	109	5-bed house	10	-	10	<b>TOTAL</b>	<b>150</b>	<b>100</b>	<b>250</b>					
House types	Private	Affordable	TOTAL																																									
1-bed flat	-	8	8																																									
2-bed flat	-	12	12																																									
2-bed house	-	28	28																																									
3-bed house	45	38	83																																									
4-bed House	95	14	109																																									
5-bed house	10	-	10																																									
<b>TOTAL</b>	<b>150</b>	<b>100</b>	<b>250</b>																																									
<b>Sites recommended for allocation by Officers but rejected by Members</b>																																												
Land at Lodge Road Staplehurst	TQ 78081 44301 E 578081 N 144301	Adjacent to Rural Service Centre		Site for 60 units and 10,000m <sup>2</sup> employment space	60 units Mix unknown	60%	40%	10,000m <sup>2</sup> employment use. (Type unknown)	Accessed via Lodge Road/Station Approach																																			
Land South of Marden Road Staplehurst	TQ 77906 43775 E 577906 N 143775	Adjacent to Rural Service Centre		Site for 100 units	100 units Mix unknown	60%	40%																																					

Land south of Oliver Road (known as Land north of Henhurst Farm)	TQ 78101 43292 E 578101 N 143292	Adjacent to Rural Service Centre		Site for 60 units	60 units Mix unknown	60%	40%		Site likely to be to be accessed through new development being constructed in Oliver Road immediately to the north.
<b>Links to website for documents</b>									
<b>Application no.</b>	<b>Web link (type in application number)</b>								
14/502010/OUT	<a href="http://pa.midkent.gov.uk/online-applications/">http://pa.midkent.gov.uk/online-applications/</a>								
14/505432/FULL	<a href="http://pa.midkent.gov.uk/online-applications/">http://pa.midkent.gov.uk/online-applications/</a>								

## Appendix C. Junction assessment outputs

- C.1 Picady outputs - A229 Station Road / Station Approach / Market Street
- C.2 LinSig outputs - Station Road / Headcorn Road / High Street / Marden Road

# Junctions 8

## PICADY 8 - Priority Intersection Module

Version: 8.0.4.487 [15039,24/03/2014]  
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**Filename:** Picady model.arc8

**Path:** P:\Southampton\ITW\Projects\344395 Maidstone BC Transport Planning\Staplehurst\Picady\v2

**Report generation date:** 22/05/2015 15:42:30

### Summary of junction performance

	AM				PM			
	Queue (PCU)	Delay (s)	RFC	LOS	Queue (PCU)	Delay (s)	RFC	LOS
<b>A229 Station Road/Market Street crossroads - 2014</b>								
Stream B-CD	0.03	7.50	0.03	A	0.02	7.67	0.02	A
Stream B-AD	0.03	15.42	0.03	C	0.01	15.28	0.01	C
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	0.30	8.64	0.23	A	0.07	6.82	0.06	A
Stream D-AB	0.08	7.96	0.08	A	0.34	9.71	0.25	A
Stream D-BC	0.34	15.23	0.25	C	0.75	16.85	0.43	C
Stream C-ABD	0.04	4.43	0.03	A	0.04	4.91	0.03	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
<b>A229 Station Road/Market Street crossroads - Base 2031</b>								
Stream B-CD	0.04	7.95	0.04	A	0.03	8.17	0.03	A

Stream B-AD	0.04	19.11	0.04	C	0.02	18.75	0.02	C
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	0.46	10.45	0.32	B	0.10	7.34	0.08	A
Stream D-AB	0.12	9.28	0.11	A	0.66	14.52	0.39	B
Stream D-BC	0.63	23.17	0.39	C	1.62	29.66	0.62	D
Stream C-ABD	0.06	4.24	0.04	A	0.07	4.78	0.05	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-
<b>A229 Station Road/Market Street crossroads - Design 2031</b>								
Stream B-CD	0.04	8.13	0.04	A	0.03	8.63	0.03	A
Stream B-AD	0.05	25.75	0.05	D	0.03	26.27	0.03	D
Stream A-B	-	-	-	-	-	-	-	-
Stream A-C	-	-	-	-	-	-	-	-
Stream A-D	1.50	19.49	0.61	C	0.16	7.99	0.13	A
Stream D-AB	0.31	14.38	0.24	B	11.97	157.28	1.01	F
Stream D-BC	1.71	59.33	0.65	F	10.74	164.28	1.00	F
Stream C-ABD	0.08	4.13	0.05	A	0.08	4.73	0.05	A
Stream C-D	-	-	-	-	-	-	-	-
Stream C-A	-	-	-	-	-	-	-	-

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

"D1 - 2014, PM" model duration: 16:15 - 17:45

"D2 - 2014, AM" model duration: 07:30 - 09:00

"D4 - Base 2031, PM" model duration: 16:15 - 17:45

"D5 - Base 2031, AM" model duration: 07:30 - 09:00

"D6 - Design 2031, AM" model duration: 07:30 - 09:00

"D7 - Design 2031, PM" model duration: 16:15 - 17:45

Run using Junctions 8.0.4.487 at 22/05/2015 15:42:27

## File summary

<b>Title</b>	(untitled)
<b>Location</b>	

Site Number	
Date	19/01/2015
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Enumerator	alm42356
Description	

## Analysis Options

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

## Units

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

# A229 Station Road/Market Street crossroads - 2014, PM

## Data Errors and Warnings

*No errors or warnings*

## Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
A229 Station Road/Market Street crossroads	N/A			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
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2014, PM	2014	PM		ONE HOUR	16:15	17:45	90	15		
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# Junction Network

## Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	12.28	B

## Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major
D	D	(untitled)		Minor

## Major Arm Geometry

Arm	Width of carrieway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	7.00		0.00		2.20	250.00		
C	7.00		0.00		2.20	130.00	✓	0.00

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

## Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus				4.40	2.20	2.20	2.20	2.20		1.00	20	20



	flare													
D	One lane plus flare				10.00	8.00	5.50	4.00	4.00			2.00	29	43

## 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-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	718.741	-	-	-	-	-	-	0.266	0.381	0.266	-	-	-
1	B-A	399.968	0.070	0.176	0.176	-	-	-	0.111	0.252	-	0.176	0.176	0.088
1	B-C	599.565	0.088	0.222	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	465.242	0.081	0.205	0.205	-	-	-	0.129	0.293	0.129	-	-	-
1	B-D, offside lane	399.968	0.070	0.176	0.176	-	-	-	0.111	0.252	0.111	-	-	-
1	C-B	649.248	0.241	0.241	0.344	-	-	-	-	-	-	-	-	-
1	D-A	692.976	-	-	-	-	-	-	0.257	-	0.102	-	-	-
1	D-B, nearside lane	540.875	0.150	0.150	0.340	-	-	-	0.238	0.238	0.094	-	-	-
1	D-B, offside lane	568.623	0.158	0.158	0.358	-	-	-	0.250	0.250	0.099	-	-	-
1	D-C	568.623	-	0.158	0.358	0.125	0.250	0.250	0.250	0.250	0.099	-	-	-

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

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

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

## Traffic Flows

### Demand Set Data Options

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

## Entry Flows

## General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	454.00	100.000
B	ONE HOUR	✓	12.00	100.000
C	ONE HOUR	✓	404.00	100.000
D	ONE HOUR	✓	264.00	100.000

## Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	6.000	414.000	34.000
	B	2.000	0.000	9.000	1.000
	C	319.000	12.000	0.000	73.000
	D	116.000	0.000	148.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.01	0.91	0.07
	B	0.17	0.00	0.75	0.08
	C	0.79	0.03	0.00	0.18
	D	0.44	0.00	0.56	0.00

## Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.043	1.063

	<b>B</b>	1.000	1.000	1.000	1.000
	<b>C</b>	1.057	1.000	1.000	1.043
	<b>D</b>	1.045	1.000	1.014	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	4.3	6.3
	B	0.0	0.0	0.0	0.0
	C	5.7	0.0	0.0	4.3
	D	4.5	0.0	1.4	0.0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
<b>B-CD</b>	0.02	7.67	0.02	A
<b>B-AD</b>	0.01	15.28	0.01	C
<b>A-B</b>	-	-	-	-
<b>A-C</b>	-	-	-	-
<b>A-D</b>	0.06	6.82	0.07	A
<b>D-AB</b>	0.25	9.71	0.34	A
<b>D-BC</b>	0.43	16.85	0.75	C
<b>C-ABD</b>	0.03	4.91	0.04	A
<b>C-D</b>	-	-	-	-
<b>C-A</b>	-	-	-	-

### Main Results for each time segment

**Main results: (16:15-16:30)**

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	7.15	7.10	0.00	515.63	0.014	0.01	7.079	A
B-AD	1.88	1.85	0.00	289.79	0.006	0.01	12.503	B
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	311.68	311.68	0.00	-	-	-	-	-
A-D	25.60	25.42	0.00	636.69	0.040	0.04	6.259	A
D-AB	87.33	86.60	0.00	584.22	0.149	0.18	7.549	A
D-BC	111.42	110.07	0.00	440.15	0.253	0.34	11.015	B
C-ABD	14.20	14.12	0.00	762.38	0.019	0.02	4.903	A
C-D	54.00	54.00	0.00	-	-	-	-	-
C-A	235.95	235.95	0.00	-	-	-	-	-

**Main results: (16:30-16:45)**

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	8.54	8.53	0.00	500.74	0.017	0.02	7.313	A
B-AD	2.24	2.24	0.00	268.19	0.008	0.01	13.535	B
A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	372.18	372.18	0.00	-	-	-	-	-
A-D	30.57	30.52	0.00	620.74	0.049	0.05	6.483	A
D-AB	104.28	104.06	0.00	558.11	0.187	0.24	8.281	A
D-BC	133.05	132.52	0.00	414.89	0.321	0.47	12.903	B
C-ABD	18.53	18.50	0.00	785.39	0.024	0.03	4.791	A
C-D	64.18	64.18	0.00	-	-	-	-	-
C-A	280.47	280.47	0.00	-	-	-	-	-

**Main results: (16:45-17:00)**

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
--------	-----------------------	---------------------	----------------------------	-------------------	-----	-----------------	-----------	-----

B-CD	10.46	10.45	0.00	479.98	0.022	0.02	7.666	A
B-AD	2.75	2.73	0.00	238.38	0.012	0.01	15.277	C
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	455.82	455.82	0.00	-	-	-	-	-
A-D	37.43	37.37	0.00	598.71	0.063	0.07	6.817	A
D-AB	127.72	127.31	0.00	515.93	0.248	0.34	9.671	A
D-BC	162.95	161.87	0.00	379.31	0.430	0.74	16.701	C
C-ABD	25.56	25.51	0.00	817.23	0.031	0.04	4.656	A
C-D	78.08	78.08	0.00	-	-	-	-	-
C-A	341.18	341.18	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	10.46	10.46	0.00	479.95	0.022	0.02	7.666	A
B-AD	2.75	2.75	0.00	238.27	0.012	0.01	15.283	C
A-B	6.61	6.61	0.00	-	-	-	-	-
A-C	455.82	455.82	0.00	-	-	-	-	-
A-D	37.43	37.43	0.00	598.70	0.063	0.07	6.817	A
D-AB	127.72	127.71	0.00	514.99	0.248	0.34	9.713	A
D-BC	162.95	162.91	0.00	379.37	0.430	0.75	16.854	C
C-ABD	25.58	25.58	0.00	817.23	0.031	0.04	4.665	A
C-D	78.07	78.07	0.00	-	-	-	-	-
C-A	341.16	341.16	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	8.54	8.56	0.00	500.68	0.017	0.02	7.314	A
B-AD	2.24	2.26	0.00	268.06	0.008	0.01	13.543	B

A-B	5.39	5.39	0.00	-	-	-	-	-
A-C	372.18	372.18	0.00	-	-	-	-	-
A-D	30.57	30.63	0.00	620.71	0.049	0.06	6.485	A
D-AB	104.28	104.68	0.00	556.93	0.187	0.24	8.326	A
D-BC	133.05	134.10	0.00	415.05	0.321	0.49	13.040	B
C-ABD	18.56	18.60	0.00	785.39	0.024	0.03	4.808	A
C-D	64.18	64.18	0.00	-	-	-	-	-
C-A	280.45	280.45	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	7.15	7.17	0.00	515.54	0.014	0.01	7.080	A
B-AD	1.88	1.89	0.00	289.65	0.006	0.01	12.512	B
A-B	4.52	4.52	0.00	-	-	-	-	-
A-C	311.68	311.68	0.00	-	-	-	-	-
A-D	25.60	25.64	0.00	636.65	0.040	0.04	6.265	A
D-AB	87.33	87.56	0.00	583.02	0.150	0.19	7.595	A
D-BC	111.42	111.98	0.00	440.27	0.253	0.35	11.139	B
C-ABD	14.25	14.28	0.00	762.35	0.019	0.02	4.912	A
C-D	53.99	53.99	0.00	-	-	-	-	-
C-A	235.92	235.92	0.00	-	-	-	-	-

## A229 Station Road/Market Street crossroads - 2014, AM

### Data Errors and Warnings

*No errors or warnings*

### Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors

A229 Station Road/Market Street crossroads	N/A			100.000	
--	-----	--	--	---------	--

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
2014, AM	2014	AM		ONE HOUR	07:30	09:00	90	15		

# Junction Network

## Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	10.18	B

## Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major
D	D	(untitled)		Minor

## Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	7.00		0.00		2.20	250.00		
C	7.00		0.00		2.20	130.00	✓	0.00

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

## Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				4.40	2.20	2.20	2.20	2.20		1.00	20	20
D	One lane plus flare				10.00	8.00	5.50	4.00	4.00		2.00	29	43

## 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-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	718.741	-	-	-	-	-	-	0.266	0.381	0.266	-	-	-
1	B-A	418.099	0.073	0.184	0.184	-	-	-	0.116	0.263	-	0.184	0.184	0.092
1	B-C	594.892	0.087	0.220	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	461.616	0.080	0.203	0.203	-	-	-	0.128	0.290	0.128	-	-	-
1	B-D, offside lane	418.099	0.073	0.184	0.184	-	-	-	0.116	0.263	0.116	-	-	-
1	C-B	649.248	0.241	0.241	0.344	-	-	-	-	-	-	-	-	-
1	D-A	668.005	-	-	-	-	-	-	0.248	-	0.098	-	-	-
1	D-B, nearside lane	521.384	0.144	0.144	0.328	-	-	-	0.230	0.230	0.091	-	-	-
1	D-B, offside lane	588.114	0.163	0.163	0.370	-	-	-	0.259	0.259	0.102	-	-	-
1	D-C	588.114	-	0.163	0.370	0.129	0.259	0.259	0.259	0.259	0.102	-	-	-

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

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

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

## Traffic Flows

### Demand Set Data Options

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

## General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	521.00	100.000
B	ONE HOUR	✓	18.00	100.000
C	ONE HOUR	✓	591.00	100.000
D	ONE HOUR	✓	108.00	100.000

# Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	2.000	403.000	116.000
	B	6.000	0.000	12.000	0.000
	C	434.000	9.000	0.000	148.000
	D	34.000	1.000	73.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.00	0.77	0.22
	B	0.33	0.00	0.67	0.00
	C	0.73	0.02	0.00	0.25
	D	0.31	0.01	0.68	0.00

# Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.020	1.000
	B	1.000	1.000	1.000	1.000
	C	1.032	1.000	1.000	1.015
	D	1.000	1.000	1.016	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	2.0	0.0
	B	0.0	0.0	0.0	0.0
	C	3.2	0.0	0.0	1.5
	D	0.0	0.0	1.6	0.0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.03	7.50	0.03	A
B-AD	0.03	15.42	0.03	C
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.23	8.64	0.30	A
D-AB	0.08	7.96	0.08	A
D-BC	0.25	15.23	0.34	C
C-ABD	0.03	4.43	0.04	A
C-D	-	-	-	-
C-A	-	-	-	-

## Main Results for each time segment

### Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	9.03	8.96	0.00	525.86	0.017	0.02	6.964	A
B-AD	4.52	4.46	0.00	296.52	0.015	0.02	12.323	B
A-B	1.51	1.51	0.00	-	-	-	-	-
A-C	303.40	303.40	0.00	-	-	-	-	-
A-D	87.33	86.65	0.00	599.45	0.146	0.17	7.012	A
D-AB	26.02	25.83	0.00	551.08	0.047	0.05	6.852	A
D-BC	55.28	54.65	0.00	405.68	0.136	0.16	10.400	B
C-ABD	12.92	12.85	0.00	837.26	0.015	0.02	4.423	A
C-D	109.86	109.86	0.00	-	-	-	-	-
C-A	322.15	322.15	0.00	-	-	-	-	-

### Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	10.79	10.77	0.00	512.23	0.021	0.02	7.178	A
B-AD	5.39	5.38	0.00	272.84	0.020	0.02	13.460	B
A-B	1.80	1.80	0.00	-	-	-	-	-
A-C	362.29	362.29	0.00	-	-	-	-	-
A-D	104.28	104.08	0.00	576.28	0.181	0.22	7.620	A
D-AB	31.10	31.04	0.00	526.59	0.059	0.06	7.264	A
D-BC	65.99	65.76	0.00	370.01	0.178	0.22	12.010	B
C-ABD	17.39	17.37	0.00	873.27	0.020	0.02	4.264	A
C-D	130.68	130.68	0.00	-	-	-	-	-

C-A	383.22	383.22	0.00	-	-	-	-	-
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**Main results: (08:00-08:15)**

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	13.21	13.19	0.00	493.35	0.027	0.03	7.496	A
B-AD	6.61	6.57	0.00	240.13	0.028	0.03	15.412	C
A-B	2.20	2.20	0.00	-	-	-	-	-
A-C	443.71	443.71	0.00	-	-	-	-	-
A-D	127.72	127.38	0.00	544.26	0.235	0.30	8.628	A
D-AB	38.12	38.04	0.00	490.56	0.078	0.08	7.955	A
D-BC	80.79	80.32	0.00	320.94	0.252	0.33	15.168	C
C-ABD	24.95	24.91	0.00	921.75	0.027	0.03	4.076	A
C-D	159.13	159.13	0.00	-	-	-	-	-
C-A	466.63	466.63	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	13.21	13.21	0.00	493.30	0.027	0.03	7.497	A
B-AD	6.61	6.61	0.00	240.09	0.028	0.03	15.418	C
A-B	2.20	2.20	0.00	-	-	-	-	-
A-C	443.71	443.71	0.00	-	-	-	-	-
A-D	127.72	127.71	0.00	544.24	0.235	0.30	8.642	A
D-AB	38.13	38.12	0.00	490.22	0.078	0.08	7.962	A
D-BC	80.78	80.77	0.00	320.84	0.252	0.34	15.231	C
C-ABD	24.97	24.97	0.00	921.70	0.027	0.04	4.082	A
C-D	159.12	159.12	0.00	-	-	-	-	-
C-A	466.61	466.61	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	10.79	10.81	0.00	512.15	0.021	0.02	7.183	A
B-AD	5.39	5.42	0.00	272.81	0.020	0.02	13.464	B
A-B	1.80	1.80	0.00	-	-	-	-	-
A-C	362.29	362.29	0.00	-	-	-	-	-
A-D	104.28	104.61	0.00	576.26	0.181	0.22	7.637	A
D-AB	31.10	31.18	0.00	526.13	0.059	0.06	7.273	A
D-BC	65.99	66.45	0.00	369.85	0.178	0.22	12.073	B
C-ABD	17.42	17.46	0.00	873.16	0.020	0.02	4.273	A
C-D	130.68	130.68	0.00	-	-	-	-	-
C-A	383.20	383.20	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	9.03	9.05	0.00	525.73	0.017	0.02	6.969	A
B-AD	4.52	4.54	0.00	296.49	0.015	0.02	12.333	B
A-B	1.51	1.51	0.00	-	-	-	-	-
A-C	303.40	303.40	0.00	-	-	-	-	-
A-D	87.33	87.54	0.00	599.42	0.146	0.17	7.034	A
D-AB	26.03	26.08	0.00	550.57	0.047	0.05	6.866	A
D-BC	55.28	55.53	0.00	405.38	0.136	0.16	10.460	B
C-ABD	12.97	12.99	0.00	837.06	0.015	0.02	4.429	A
C-D	109.85	109.85	0.00	-	-	-	-	-
C-A	322.12	322.12	0.00	-	-	-	-	-

## A229 Station Road/Market Street crossroads - Base 2031, PM

### Data Errors and Warnings

No errors or warnings

## Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
A229 Station Road/Market Street crossroads	N/A			100.000	

## Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Base 2031, PM	Base 2031	PM		ONE HOUR	16:15	17:45	90	15		

# Junction Network

## Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	19.51	C

## Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major
D	D	(untitled)		Minor

## Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
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					(m)			
A	7.00			0.00		2.20	250.00	
C	7.00			0.00		2.20	130.00	✓ 0.00

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

## Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				4.40	2.20	2.20	2.20	2.20		1.00	20	20
D	One lane plus flare				10.00	8.00	5.50	4.00	4.00		2.00	29	43

## 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-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	718.741	-	-	-	-	-	-	0.266	0.381	0.266	-	-	-
1	B-A	403.594	0.070	0.178	0.178	-	-	-	0.112	0.254	-	0.178	0.178	0.089
1	B-C	598.631	0.088	0.222	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	464.517	0.081	0.205	0.205	-	-	-	0.129	0.292	0.129	-	-	-
1	B-D, offside lane	403.594	0.070	0.178	0.178	-	-	-	0.112	0.254	0.112	-	-	-
1	C-B	649.248	0.241	0.241	0.344	-	-	-	-	-	-	-	-	-
1	D-A	695.913	-	-	-	-	-	-	0.258	-	0.102	-	-	-
1	D-B, nearside lane	543.167	0.150	0.150	0.342	-	-	-	0.239	0.239	0.095	-	-	-
1	D-B, offside lane	566.331	0.157	0.157	0.356	-	-	-	0.249	0.249	0.099	-	-	-
1	D-C	566.331	-	0.157	0.356	0.125	0.249	0.249	0.249	0.249	0.099	-	-	-

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

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

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

# Traffic Flows

## Demand Set Data Options

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

# Entry Flows

## General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	569.00	100.000
B	ONE HOUR	✓	15.00	100.000
C	ONE HOUR	✓	505.00	100.000
D	ONE HOUR	✓	336.00	100.000

# Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	8.000	518.000	43.000
	B	3.000	0.000	11.000	1.000
	C	399.000	15.000	0.000	91.000
	D	151.000	0.000	185.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.01	0.91	0.08



	<b>B</b>	0.20	0.00	0.73	0.07
	<b>C</b>	0.79	0.03	0.00	0.18
	<b>D</b>	0.45	0.00	0.55	0.00

## Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.043	1.063
	B	1.000	1.000	1.000	1.000
	C	1.057	1.000	1.000	1.043
	D	1.045	1.000	1.014	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	4.3	6.3
	B	0.0	0.0	0.0	0.0
	C	5.7	0.0	0.0	4.3
	D	4.5	0.0	1.4	0.0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.03	8.17	0.03	A
B-AD	0.02	18.75	0.02	C
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.08	7.34	0.10	A

D-AB	0.39	14.52	0.66	B
D-BC	0.62	29.66	1.62	D
C-ABD	0.05	4.78	0.07	A
C-D	-	-	-	-
C-A	-	-	-	-

## Main Results for each time segment

### Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	8.66	8.59	0.00	497.96	0.017	0.02	7.356	A
B-AD	2.63	2.59	0.00	262.34	0.010	0.01	13.858	B
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	389.98	389.98	0.00	-	-	-	-	-
A-D	32.37	32.14	0.00	616.18	0.053	0.06	6.547	A
D-AB	113.68	112.61	0.00	553.08	0.206	0.27	8.521	A
D-BC	139.28	137.20	0.00	405.64	0.343	0.52	13.500	B
C-ABD	19.85	19.72	0.00	791.81	0.025	0.03	4.769	A
C-D	66.92	66.92	0.00	-	-	-	-	-
C-A	293.42	293.42	0.00	-	-	-	-	-

### Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	10.34	10.33	0.00	479.30	0.022	0.02	7.675	A
B-AD	3.14	3.13	0.00	234.54	0.013	0.01	15.555	C
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	465.67	465.67	0.00	-	-	-	-	-

A-D	38.66	38.60	0.00	596.23	0.065	0.07	6.862	A
D-AB	135.75	135.33	0.00	511.84	0.265	0.37	9.980	A
D-BC	166.31	165.23	0.00	373.28	0.446	0.79	17.450	C
C-ABD	26.45	26.40	0.00	820.51	0.032	0.04	4.644	A
C-D	79.40	79.40	0.00	-	-	-	-	-
C-A	348.14	348.14	0.00	-	-	-	-	-

**Main results: (16:45-17:00)**

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	12.67	12.64	0.00	453.08	0.028	0.03	8.173	A
B-AD	3.84	3.82	0.00	196.20	0.020	0.02	18.710	C
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	570.33	570.33	0.00	-	-	-	-	-
A-D	47.34	47.25	0.00	568.70	0.083	0.10	7.339	A
D-AB	166.25	165.17	0.00	429.63	0.387	0.64	14.165	B
D-BC	203.69	200.59	0.00	326.01	0.625	1.56	28.410	D
C-ABD	40.94	40.83	0.00	877.72	0.047	0.07	4.428	A
C-D	95.66	95.66	0.00	-	-	-	-	-
C-A	419.42	419.42	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	12.67	12.67	0.00	453.03	0.028	0.03	8.174	A
B-AD	3.84	3.84	0.00	195.83	0.020	0.02	18.751	C
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	570.33	570.33	0.00	-	-	-	-	-
A-D	47.34	47.34	0.00	568.67	0.083	0.10	7.339	A
D-AB	166.25	166.19	0.00	425.05	0.391	0.66	14.524	B

D-BC	203.69	203.46	0.00	325.92	0.625	1.62	29.656	D
C-ABD	40.98	40.98	0.00	877.76	0.047	0.07	4.441	A
C-D	95.65	95.65	0.00	-	-	-	-	-
C-A	419.38	419.38	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	10.34	10.37	0.00	479.20	0.022	0.02	7.678	A
B-AD	3.14	3.16	0.00	234.07	0.013	0.01	15.593	C
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	465.67	465.67	0.00	-	-	-	-	-
A-D	38.66	38.74	0.00	596.19	0.065	0.07	6.865	A
D-AB	135.75	136.84	0.00	507.80	0.267	0.39	10.172	B
D-BC	166.31	169.43	0.00	373.54	0.445	0.84	18.143	C
C-ABD	26.49	26.60	0.00	820.54	0.032	0.04	4.669	A
C-D	79.39	79.39	0.00	-	-	-	-	-
C-A	348.10	348.10	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	8.66	8.68	0.00	497.84	0.017	0.02	7.361	A
B-AD	2.63	2.65	0.00	262.01	0.010	0.01	13.882	B
A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	389.98	389.98	0.00	-	-	-	-	-
A-D	32.37	32.43	0.00	616.13	0.053	0.06	6.558	A
D-AB	113.68	114.13	0.00	550.67	0.206	0.28	8.626	A
D-BC	139.28	140.48	0.00	405.81	0.343	0.54	13.818	B
C-ABD	19.92	19.97	0.00	791.78	0.025	0.03	4.781	A

C-D	66.91	66.91	0.00	-	-	-	-	-
C-A	293.36	293.36	0.00	-	-	-	-	-

## A229 Station Road/Market Street crossroads - Base 2031, AM

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
A229 Station Road/Market Street crossroads	N/A			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Base 2031, AM	Base 2031	AM		ONE HOUR	07:30	09:00	90	15		

## Junction Network

### Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	13.25	B

### Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

## Arms

### Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major

<b>B</b>	B	(untitled)		Minor
<b>C</b>	C	(untitled)		Major
<b>D</b>	D	(untitled)		Minor

## Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
<b>A</b>	7.00		0.00		2.20	250.00		
<b>C</b>	7.00		0.00		2.20	130.00	✓	0.00

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

## Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
<b>B</b>	One lane plus flare				4.40	2.20	2.20	2.20	2.20		1.00	20	20
<b>D</b>	One lane plus flare				10.00	8.00	5.50	4.00	4.00		2.00	29	43

## 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-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	718.741	-	-	-	-	-	-	0.266	0.381	0.266	-	-	-
1	B-A	414.803	0.072	0.183	0.183	-	-	-	0.115	0.261	-	0.183	0.183	0.091
1	B-C	595.742	0.087	0.221	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	462.275	0.081	0.204	0.204	-	-	-	0.128	0.291	0.128	-	-	-
1	B-D, offside lane	414.803	0.072	0.183	0.183	-	-	-	0.115	0.261	0.115	-	-	-
1	C-B	649.248	0.241	0.241	0.344	-	-	-	-	-	-	-	-	-
1	D-A	667.913	-	-	-	-	-	-	0.248	-	0.098	-	-	-
1	D-B, nearside lane	521.313	0.144	0.144	0.328	-	-	-	0.230	0.230	0.091	-	-	-

1	D-B, offside lane	588.185	0.163	0.163	0.370	-	-	-	0.259	0.259	0.102	-	-	-
1	D-C	588.185	-	0.163	0.370	0.130	0.259	0.259	0.259	0.259	0.102	-	-	-

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

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

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

## Traffic Flows

### Demand Set Data Options

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

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	645.00	100.000
B	ONE HOUR	✓	22.00	100.000
C	ONE HOUR	✓	731.00	100.000
D	ONE HOUR	✓	133.00	100.000

## Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	2.000	499.000	144.000
	B	7.000	0.000	15.000	0.000
	C	537.000	11.000	0.000	183.000
	D	42.000	1.000	90.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.00	0.77	0.22
	B	0.32	0.00	0.68	0.00
	C	0.73	0.02	0.00	0.25
	D	0.32	0.01	0.68	0.00

## Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.020	1.000
	B	1.000	1.000	1.000	1.000
	C	1.032	1.000	1.000	1.015
	D	1.000	1.000	1.016	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	2.0	0.0
	B	0.0	0.0	0.0	0.0
	C	3.2	0.0	0.0	1.5
	D	0.0	0.0	1.6	0.0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.04	7.95	0.04	A



B-AD	0.04	19.11	0.04	C
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.32	10.45	0.46	B
D-AB	0.11	9.28	0.12	A
D-BC	0.39	23.17	0.63	C
C-ABD	0.04	4.24	0.06	A
C-D	-	-	-	-
C-A	-	-	-	-

## Main Results for each time segment

### Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	11.29	11.20	0.00	510.12	0.022	0.02	7.216	A
B-AD	5.27	5.19	0.00	265.55	0.020	0.02	13.822	B
A-B	1.51	1.51	0.00	-	-	-	-	-
A-C	375.67	375.67	0.00	-	-	-	-	-
A-D	108.41	107.48	0.00	571.21	0.190	0.23	7.748	A
D-AB	32.07	31.81	0.00	522.65	0.061	0.06	7.331	A
D-BC	68.06	67.14	0.00	362.28	0.188	0.23	12.354	B
C-ABD	18.22	18.12	0.00	881.23	0.021	0.03	4.233	A
C-D	135.25	135.25	0.00	-	-	-	-	-
C-A	396.87	396.87	0.00	-	-	-	-	-

### Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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B-CD	13.48	13.46	0.00	493.13	0.027	0.03	7.504	A
B-AD	6.29	6.27	0.00	236.42	0.027	0.03	15.640	C
A-B	1.80	1.80	0.00	-	-	-	-	-
A-C	448.59	448.59	0.00	-	-	-	-	-
A-D	129.45	129.14	0.00	542.54	0.239	0.31	8.702	A
D-AB	38.32	38.25	0.00	489.91	0.078	0.08	7.970	A
D-BC	81.24	80.80	0.00	318.07	0.255	0.34	15.385	C
C-ABD	25.12	25.08	0.00	924.26	0.027	0.04	4.066	A
C-D	160.64	160.64	0.00	-	-	-	-	-
C-A	471.39	471.39	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	16.52	16.48	0.00	469.43	0.035	0.04	7.948	A
B-AD	7.71	7.65	0.00	196.25	0.039	0.04	19.085	C
A-B	2.20	2.20	0.00	-	-	-	-	-
A-C	549.41	549.41	0.00	-	-	-	-	-
A-D	158.55	157.97	0.00	502.93	0.315	0.45	10.418	B
D-AB	47.01	46.87	0.00	436.07	0.108	0.12	9.247	A
D-BC	99.43	98.33	0.00	257.25	0.387	0.62	22.853	C
C-ABD	43.96	43.85	0.00	1021.82	0.043	0.06	3.749	A
C-D	193.39	193.39	0.00	-	-	-	-	-
C-A	567.49	567.49	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	16.52	16.51	0.00	469.35	0.035	0.04	7.949	A
B-AD	7.71	7.71	0.00	196.11	0.039	0.04	19.107	C

A-B	2.20	2.20	0.00	-	-	-	-	-
A-C	549.41	549.41	0.00	-	-	-	-	-
A-D	158.55	158.53	0.00	502.90	0.315	0.46	10.453	B
D-AB	47.01	47.01	0.00	434.94	0.108	0.12	9.279	A
D-BC	99.42	99.38	0.00	257.07	0.387	0.63	23.169	C
C-ABD	44.01	44.01	0.00	1021.77	0.043	0.06	3.757	A
C-D	193.38	193.38	0.00	-	-	-	-	-
C-A	567.45	567.45	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	13.48	13.52	0.00	492.99	0.027	0.03	7.510	A
B-AD	6.29	6.34	0.00	236.29	0.027	0.03	15.658	C
A-B	1.80	1.80	0.00	-	-	-	-	-
A-C	448.59	448.59	0.00	-	-	-	-	-
A-D	129.45	130.01	0.00	542.50	0.239	0.32	8.739	A
D-AB	38.32	38.46	0.00	488.76	0.078	0.09	7.998	A
D-BC	81.24	82.32	0.00	317.82	0.256	0.36	15.599	C
C-ABD	25.17	25.28	0.00	924.12	0.027	0.04	4.082	A
C-D	160.63	160.63	0.00	-	-	-	-	-
C-A	471.36	471.36	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	11.29	11.31	0.00	509.95	0.022	0.02	7.219	A
B-AD	5.27	5.30	0.00	265.43	0.020	0.02	13.842	B
A-B	1.51	1.51	0.00	-	-	-	-	-
A-C	375.67	375.67	0.00	-	-	-	-	-

A-D	108.41	108.73	0.00	571.16	0.190	0.24	7.790	A
D-AB	32.07	32.15	0.00	521.77	0.061	0.07	7.355	A
D-BC	68.06	68.53	0.00	361.86	0.188	0.24	12.487	B
C-ABD	18.29	18.33	0.00	880.97	0.021	0.03	4.241	A
C-D	135.23	135.23	0.00	-	-	-	-	-
C-A	396.81	396.81	0.00	-	-	-	-	-

## A229 Station Road/Market Street crossroads - Design 2031, AM

### Data Errors and Warnings

No errors or warnings

### Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
A229 Station Road/Market Street crossroads	N/A			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Design 2031, AM	Design 2031	AM		ONE HOUR	07:30	09:00	90	15		

## Junction Network

### Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
1	(untitled)	Crossroads	Two-way	A,B,C,D	25.41	D

### Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major
D	D	(untitled)		Minor

## Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	7.00		0.00		2.20	250.00		
C	7.00		0.00		2.20	130.00	✓	0.00

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

## Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				4.40	2.20	2.20	2.20	2.20		1.00	20	20
D	One lane plus flare				10.00	8.00	5.50	4.00	4.00		2.00	29	43

## 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-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	718.741	-	-	-	-	-	-	0.266	0.381	0.266	-	-	-
1	B-A	414.803	0.072	0.183	0.183	-	-	-	0.115	0.261	-	0.183	0.183	0.091
1	B-C	595.742	0.087	0.221	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	462.275	0.081	0.204	0.204	-	-	-	0.128	0.291	0.128	-	-	-

1	B-D, offside lane	414.803	0.072	0.183	0.183	-	-	-	0.115	0.261	0.115	-	-	-
1	C-B	649.248	0.241	0.241	0.344	-	-	-	-	-	-	-	-	-
1	D-A	686.879	-	-	-	-	-	-	0.255	-	0.101	-	-	-
1	D-B, nearside lane	536.116	0.149	0.149	0.337	-	-	-	0.236	0.236	0.093	-	-	-
1	D-B, offside lane	573.382	0.159	0.159	0.361	-	-	-	0.252	0.252	0.100	-	-	-
1	D-C	573.382	-	0.159	0.361	0.126	0.252	0.252	0.252	0.252	0.100	-	-	-

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

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

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

## Traffic Flows

### Demand Set Data Options

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

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	794.00	100.000
B	ONE HOUR	✓	22.00	100.000
C	ONE HOUR	✓	853.00	100.000
D	ONE HOUR	✓	172.00	100.000

## Turning Proportions

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

		To			
From		A	B	C	D

	<b>A</b>	0.000	2.000	535.000	257.000
	<b>B</b>	7.000	0.000	15.000	0.000
	<b>C</b>	621.000	11.000	0.000	221.000
	<b>D</b>	71.000	1.000	100.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.00	0.67	0.32
	B	0.32	0.00	0.68	0.00
	C	0.73	0.01	0.00	0.26
	D	0.41	0.01	0.58	0.00

## Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.020	1.000
	B	1.000	1.000	1.000	1.000
	C	1.032	1.000	1.000	1.015
	D	1.000	1.000	1.016	1.000

### Heavy Vehicle Percentages - Junction 1 (for whole period)

		To			
		A	B	C	D
From	A	0.0	0.0	2.0	0.0
	B	0.0	0.0	0.0	0.0
	C	3.2	0.0	0.0	1.5
	D	0.0	0.0	1.6	0.0

# Results

## Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.04	8.13	0.04	A
B-AD	0.05	25.75	0.05	D
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.61	19.49	1.50	C
D-AB	0.24	14.38	0.31	B
D-BC	0.65	59.33	1.71	F
C-ABD	0.05	4.13	0.08	A
C-D	-	-	-	-
C-A	-	-	-	-

## Main Results for each time segment

### Main results: (07:30-07:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	11.29	11.20	0.00	503.82	0.022	0.02	7.308	A
B-AD	5.27	5.18	0.00	233.12	0.023	0.02	15.781	C
A-B	1.51	1.51	0.00	-	-	-	-	-
A-C	402.78	402.78	0.00	-	-	-	-	-
A-D	193.48	191.33	0.00	546.74	0.354	0.54	10.070	B
D-AB	53.92	53.46	0.00	510.60	0.106	0.12	7.867	A
D-BC	75.57	74.23	0.00	299.30	0.252	0.34	16.158	C
C-ABD	20.98	20.86	0.00	909.51	0.023	0.03	4.118	A



C-D	163.05	163.05	0.00	-	-	-	-	-
C-A	458.16	458.16	0.00	-	-	-	-	-

### Main results: (07:45-08:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	13.48	13.46	0.00	485.35	0.028	0.03	7.628	A
B-AD	6.29	6.25	0.00	197.41	0.032	0.03	18.826	C
A-B	1.80	1.80	0.00	-	-	-	-	-
A-C	480.95	480.95	0.00	-	-	-	-	-
A-D	231.04	230.00	0.00	513.32	0.450	0.80	12.657	B
D-AB	64.44	64.27	0.00	463.21	0.139	0.16	9.020	A
D-BC	90.18	89.25	0.00	245.34	0.368	0.57	23.288	C
C-ABD	29.76	29.71	0.00	956.73	0.031	0.04	3.951	A
C-D	193.46	193.46	0.00	-	-	-	-	-
C-A	543.61	543.61	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	16.52	16.48	0.00	459.19	0.036	0.04	8.132	A
B-AD	7.71	7.62	0.00	148.33	0.052	0.05	25.570	D
A-B	2.20	2.20	0.00	-	-	-	-	-
A-C	589.05	589.05	0.00	-	-	-	-	-
A-D	282.96	280.31	0.00	467.15	0.606	1.46	18.997	C
D-AB	79.08	78.54	0.00	342.60	0.231	0.29	13.607	B
D-BC	110.29	106.21	0.00	170.91	0.645	1.59	53.560	F
C-ABD	56.88	56.72	0.00	1074.22	0.053	0.08	3.609	A
C-D	231.57	231.57	0.00	-	-	-	-	-
C-A	650.71	650.71	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	16.52	16.51	0.00	459.01	0.036	0.04	8.135	A
B-AD	7.71	7.70	0.00	147.50	0.052	0.05	25.749	D
A-B	2.20	2.20	0.00	-	-	-	-	-
A-C	589.05	589.05	0.00	-	-	-	-	-
A-D	282.96	282.82	0.00	467.10	0.606	1.50	19.492	C
D-AB	79.10	79.03	0.00	329.21	0.240	0.31	14.384	B
D-BC	110.28	109.79	0.00	170.31	0.648	1.71	59.325	F
C-ABD	57.05	57.04	0.00	1073.84	0.053	0.08	3.619	A
C-D	231.53	231.53	0.00	-	-	-	-	-
C-A	650.59	650.59	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	13.48	13.52	0.00	485.10	0.028	0.03	7.633	A
B-AD	6.29	6.37	0.00	196.38	0.032	0.03	18.954	C
A-B	1.80	1.80	0.00	-	-	-	-	-
A-C	480.95	480.95	0.00	-	-	-	-	-
A-D	231.04	233.67	0.00	513.26	0.450	0.84	12.992	B
D-AB	64.45	65.03	0.00	456.02	0.141	0.17	9.220	A
D-BC	90.17	94.55	0.00	244.94	0.368	0.62	24.956	C
C-ABD	29.88	30.04	0.00	956.02	0.031	0.04	3.969	A
C-D	193.43	193.43	0.00	-	-	-	-	-
C-A	543.53	543.53	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
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B-CD	11.29	11.32	0.00	503.58	0.022	0.02	7.315	A
B-AD	5.27	5.31	0.00	232.54	0.023	0.02	15.847	C
A-B	1.51	1.51	0.00	-	-	-	-	-
A-C	402.78	402.78	0.00	-	-	-	-	-
A-D	193.48	194.61	0.00	546.69	0.354	0.56	10.257	B
D-AB	53.93	54.11	0.00	508.03	0.106	0.12	7.935	A
D-BC	75.56	76.62	0.00	298.57	0.253	0.35	16.554	C
C-ABD	21.10	21.15	0.00	908.79	0.023	0.03	4.126	A
C-D	163.02	163.02	0.00	-	-	-	-	-
C-A	458.07	458.07	0.00	-	-	-	-	-

## A229 Station Road/Market Street crossroads - Design 2031, PM

### Data Errors and Warnings

*No errors or warnings*

### Analysis Set Details

Name	Roundabout Capacity Model	Description	Locked	Network Flow Scaling Factor (%)	Reason For Scaling Factors
A229 Station Road/Market Street crossroads	N/A			100.000	

### Demand Set Details

Name	Scenario Name	Time Period Name	Description	Traffic Profile Type	Model Start Time (HH:mm)	Model Finish Time (HH:mm)	Model Time Period Length (min)	Time Segment Length (min)	Single Time Segment Only	Locked
Design 2031, PM	Design 2031	PM		ONE HOUR	16:15	17:45	90	15		

## Junction Network

### Junctions

Junction	Name	Junction Type	Major Road Direction	Arm Order	Junction Delay (s)	Junction LOS
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1	(untitled)	Crossroads	Two-way	A,B,C,D	130.22	F
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## Junction Network Options

Driving Side	Lighting
Left	Normal/unknown

# Arms

## Arms

Arm	Arm	Name	Description	Arm Type
A	A	(untitled)		Major
B	B	(untitled)		Minor
C	C	(untitled)		Major
D	D	(untitled)		Minor

## Major Arm Geometry

Arm	Width of carriageway (m)	Has kerbed central reserve	Width of kerbed central reserve (m)	Has right turn bay	Width For Right Turn (m)	Visibility For Right Turn (m)	Blocks?	Blocking Queue (PCU)
A	7.00		0.00		2.20	250.00		
C	7.00		0.00		2.20	130.00	✓	0.00

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

## Minor Arm Geometry

Arm	Minor Arm Type	Lane Width (m)	Lane Width (Left) (m)	Lane Width (Right) (m)	Width at give-way (m)	Width at 5m (m)	Width at 10m (m)	Width at 15m (m)	Width at 20m (m)	Estimate Flare Length	Flare Length (PCU)	Visibility To Left (m)	Visibility To Right (m)
B	One lane plus flare				4.40	2.20	2.20	2.20	2.20		1.00	20	20
D	One lane plus flare				10.00	8.00	5.50	4.00	4.00		2.00	29	43

## 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-C	Slope for B-D	Slope for C-A	Slope for C-B	Slope for C-D	Slope for D-A	Slope for D-B	Slope for D-C
1	A-D	718.741	-	-	-	-	-	-	0.266	0.381	0.266	-	-	-
1	B-A	403.594	0.070	0.178	0.178	-	-	-	0.112	0.254	-	0.178	0.178	0.089
1	B-C	598.631	0.088	0.222	-	-	-	-	-	-	-	-	-	-
1	B-D, nearside lane	464.517	0.081	0.205	0.205	-	-	-	0.129	0.292	0.129	-	-	-
1	B-D, offside lane	403.594	0.070	0.178	0.178	-	-	-	0.112	0.254	0.112	-	-	-
1	C-B	649.248	0.241	0.241	0.344	-	-	-	-	-	-	-	-	-
1	D-A	720.737	-	-	-	-	-	-	0.267	-	0.106	-	-	-
1	D-B, nearside lane	562.542	0.156	0.156	0.354	-	-	-	0.248	0.248	0.098	-	-	-
1	D-B, offside lane	546.956	0.152	0.152	0.344	-	-	-	0.241	0.241	0.095	-	-	-
1	D-C	546.956	-	0.152	0.344	0.120	0.241	0.241	0.241	0.241	0.095	-	-	-

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

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

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

## Traffic Flows

### Demand Set Data Options

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

## Entry Flows

### General Flows Data

Arm	Profile Type	Use Turning Counts	Average Demand Flow (PCU/hr)	Flow Scaling Factor (%)
A	ONE HOUR	✓	673.00	100.000
B	ONE HOUR	✓	15.00	100.000
C	ONE HOUR	✓	564.00	100.000

D	ONE HOUR	✓	470.00	100.000
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# Turning Proportions

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

		To			
		A	B	C	D
From	A	0.000	8.000	599.000	66.000
	B	3.000	0.000	11.000	1.000
	C	450.000	15.000	0.000	99.000
	D	251.000	0.000	219.000	0.000

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

		To			
		A	B	C	D
From	A	0.00	0.01	0.89	0.10
	B	0.20	0.00	0.73	0.07
	C	0.80	0.03	0.00	0.18
	D	0.53	0.00	0.47	0.00

# Vehicle Mix

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

		To			
		A	B	C	D
From	A	1.000	1.000	1.043	1.063
	B	1.000	1.000	1.000	1.000
	C	1.057	1.000	1.000	1.043
	D	1.045	1.000	1.014	1.000

## Heavy Vehicle Percentages - Junction 1 (for whole period)

		To

From		A	B	C	D
	A	0.0	0.0	4.3	6.3
	B	0.0	0.0	0.0	0.0
	C	5.7	0.0	0.0	4.3
	D	4.5	0.0	1.4	0.0

## Results

### Results Summary for whole modelled period

Stream	Max RFC	Max Delay (s)	Max Queue (PCU)	Max LOS
B-CD	0.03	8.63	0.03	A
B-AD	0.03	26.27	0.03	D
A-B	-	-	-	-
A-C	-	-	-	-
A-D	0.13	7.99	0.16	A
D-AB	1.01	157.28	11.97	F
D-BC	1.00	164.28	10.74	F
C-ABD	0.05	4.73	0.08	A
C-D	-	-	-	-
C-A	-	-	-	-

### Main Results for each time segment

#### Main results: (16:15-16:30)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	8.66	8.59	0.00	483.22	0.018	0.02	7.584	A
B-AD	2.63	2.59	0.00	230.12	0.011	0.01	15.816	C

A-B	6.02	6.02	0.00	-	-	-	-	-
A-C	450.96	450.96	0.00	-	-	-	-	-
A-D	49.69	49.31	0.00	604.35	0.082	0.09	6.890	A
D-AB	188.97	186.72	0.00	535.00	0.353	0.56	10.735	B
D-BC	164.87	161.61	0.00	362.35	0.455	0.82	17.912	C
C-ABD	21.37	21.23	0.00	803.56	0.027	0.03	4.716	A
C-D	72.72	72.72	0.00	-	-	-	-	-
C-A	330.53	330.53	0.00	-	-	-	-	-

### Main results: (16:30-16:45)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	10.34	10.33	0.00	461.36	0.022	0.02	7.981	A
B-AD	3.14	3.12	0.00	195.54	0.016	0.02	18.705	C
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	538.49	538.49	0.00	-	-	-	-	-
A-D	59.33	59.23	0.00	582.10	0.102	0.12	7.316	A
D-AB	225.64	224.01	0.00	461.21	0.489	0.97	15.749	C
D-BC	196.88	194.08	0.00	319.11	0.617	1.51	28.552	D
C-ABD	28.91	28.86	0.00	834.72	0.035	0.05	4.587	A
C-D	86.22	86.22	0.00	-	-	-	-	-
C-A	391.89	391.89	0.00	-	-	-	-	-

### Main results: (16:45-17:00)

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	12.67	12.65	0.00	430.27	0.029	0.03	8.620	A
B-AD	3.84	3.80	0.00	147.62	0.026	0.03	25.024	D
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	659.51	659.51	0.00	-	-	-	-	-



A-D	72.67	72.51	0.00	551.39	0.132	0.16	7.988	A
D-AB	276.36	247.38	0.00	275.47	1.003	8.21	93.530	F
D-BC	241.12	217.81	0.00	242.98	0.992	7.34	101.077	F
C-ABD	46.68	46.54	0.00	900.81	0.052	0.08	4.349	A
C-D	103.56	103.56	0.00	-	-	-	-	-
C-A	470.74	470.74	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	12.68	12.68	0.00	430.01	0.029	0.03	8.625	A
B-AD	3.84	3.83	0.00	140.87	0.027	0.03	26.268	D
A-B	8.81	8.81	0.00	-	-	-	-	-
A-C	659.51	659.51	0.00	-	-	-	-	-
A-D	72.67	72.66	0.00	551.35	0.132	0.16	7.994	A
D-AB	276.36	261.33	0.00	274.43	1.007	11.97	157.284	F
D-BC	241.12	227.55	0.00	240.08	1.004	10.74	164.283	F
C-ABD	46.73	46.73	0.00	900.85	0.052	0.08	4.362	A
C-D	103.55	103.55	0.00	-	-	-	-	-
C-A	470.69	470.69	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
B-CD	10.35	10.37	0.00	461.07	0.022	0.02	7.989	A
B-AD	3.14	3.18	0.00	185.05	0.017	0.02	19.800	C
A-B	7.19	7.19	0.00	-	-	-	-	-
A-C	538.49	538.49	0.00	-	-	-	-	-
A-D	59.33	59.49	0.00	582.05	0.102	0.12	7.324	A
D-AB	225.64	267.49	0.00	393.24	0.574	1.51	38.672	E

<b>D-BC</b>	196.88	231.13	0.00	301.22	0.654	2.17	66.526	F
<b>C-ABD</b>	28.97	29.10	0.00	834.74	0.035	0.05	4.615	A
<b>C-D</b>	86.21	86.21	0.00	-	-	-	-	-
<b>C-A</b>	391.85	391.85	0.00	-	-	-	-	-

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

Stream	Total Demand (PCU/hr)	Entry Flow (PCU/hr)	Pedestrian Demand (Ped/hr)	Capacity (PCU/hr)	RFC	End Queue (PCU)	Delay (s)	LOS
<b>B-CD</b>	8.66	8.68	0.00	483.03	0.018	0.02	7.591	A
<b>B-AD</b>	2.63	2.65	0.00	228.68	0.012	0.01	15.928	C
<b>A-B</b>	6.02	6.02	0.00	-	-	-	-	-
<b>A-C</b>	450.96	450.96	0.00	-	-	-	-	-
<b>A-D</b>	49.69	49.79	0.00	604.29	0.082	0.10	6.904	A
<b>D-AB</b>	188.97	192.61	0.00	526.72	0.359	0.60	11.376	B
<b>D-BC</b>	164.87	170.05	0.00	361.92	0.456	0.88	19.499	C
<b>C-ABD</b>	21.45	21.51	0.00	803.49	0.027	0.04	4.728	A
<b>C-D</b>	72.70	72.70	0.00	-	-	-	-	-
<b>C-A</b>	330.46	330.46	0.00	-	-	-	-	-

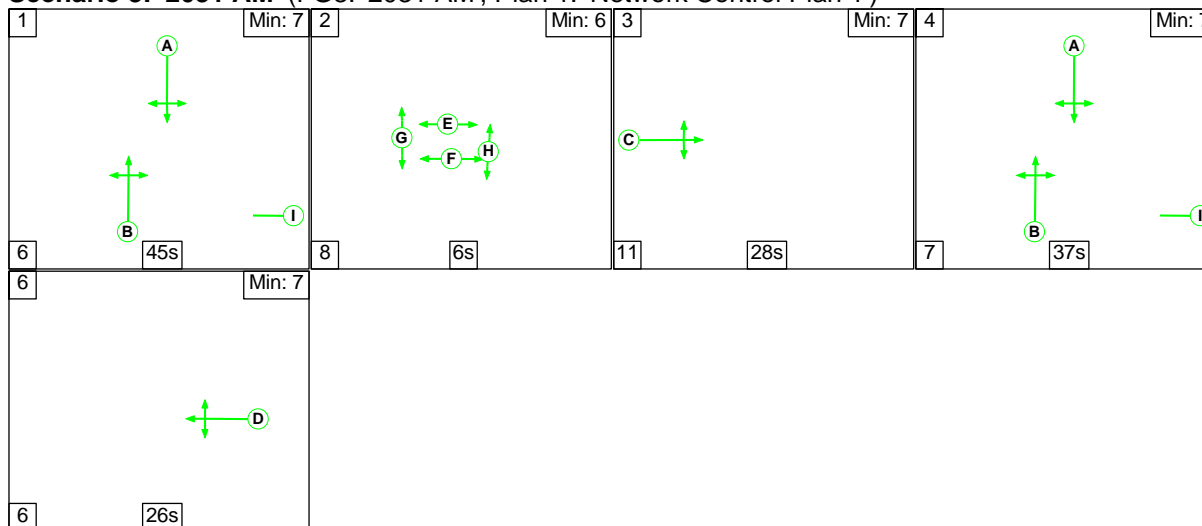
Basic Results Summary  
**Basic Results Summary**

**User and Project Details**

<b>Project:</b>	<b>Maidstone BC Junction Assessments</b>
<b>Title:</b>	<b>Staplehurst</b>
<b>Location:</b>	Maidstone
<b>File name:</b>	Staplehurst_Base_A.lsg3x
<b>Author:</b>	BR
<b>Company:</b>	Mott MacDonald
<b>Address:</b>	Stoneham Lane, Southampton SO50 9NW
<b>Notes:</b>	RR67 Sat Flow assumed. Max cycle time calculated based on TotalG of 200s + Interstage times. 200s assumed for all survey year scenarios and peds assumed to run every cycle for robust assessment. Updated with Design flows

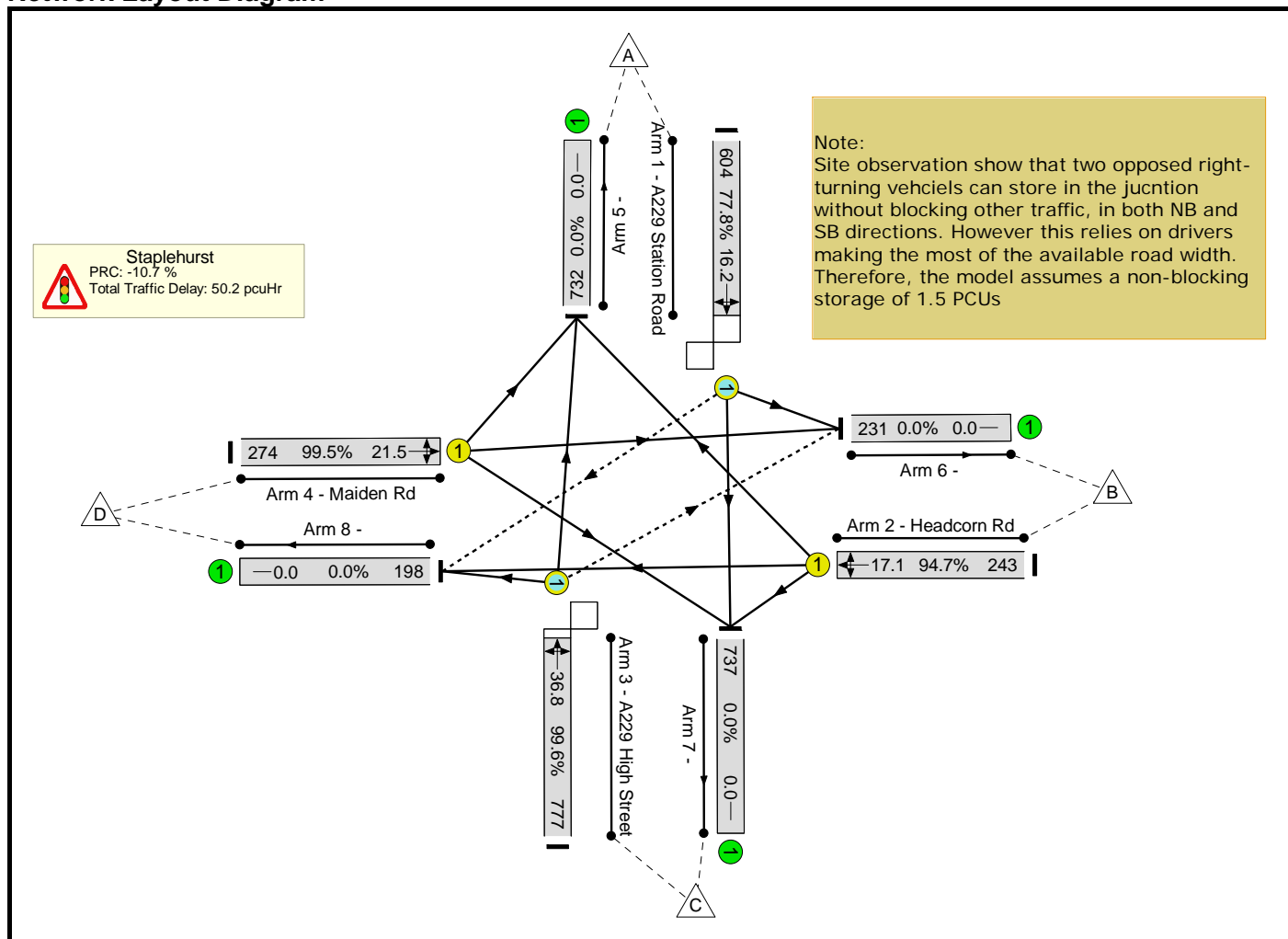
**Stage Sequence Diagram**

**Scenario 3: '2031 AM'** (FG3: '2031 AM', Plan 1: 'Network Control Plan 1')



Scenario 3: '2031 AM' (FG3: '2031 AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network: Staplehurst</b>	-	-	-		-	-	-	-	-	-	99.6%	166	0	27	50.2	-	-
<b>Staplehurst</b>	-	-	-		-	-	-	-	-	-	99.6%	166	0	27	50.2	-	-
1/1	A229 Station Road Left Ahead Right	O	A		2	83	-	604	1935	776	77.8%	40	0	27	5.2	31.2	16.2
2/1	Headcom Rd Right Left Ahead	U	D		1	26	-	243	1710	257	94.7%	-	-	-	10.2	151.6	17.1
3/1	A229 High Street Ahead Right Left	O	B		2	82	-	777	1914	780	99.6%	126	0	0	21.1	97.7	36.8
4/1	Maiden Rd Left Ahead Right	U	C		1	28	-	274	1710	276	99.5%	-	-	-	13.7	179.3	21.5
		C1			PRC for Signalled Lanes (%):		-10.7	Total Delay for Signalled Lanes (pcuHr):		50.21		Cycle Time (s):		180			
					PRC Over All Lanes (%):		-10.7	Total Delay Over All Lanes(pcuHr):		50.21							

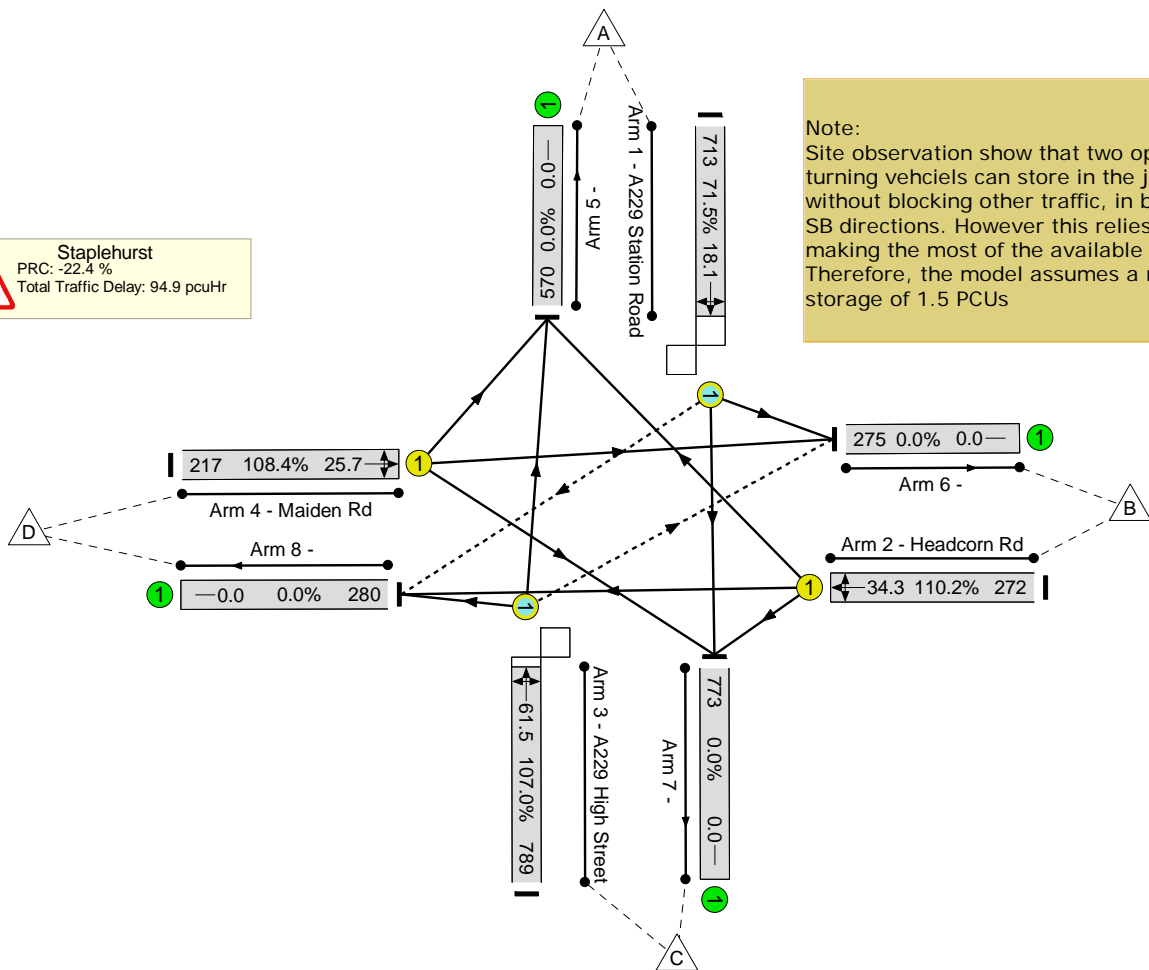
Basic Results Summary

Scenario 4: '2031 PM' (FG4: '2031 PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

Staplehurst  
 PRC: -22.4 %  
 Total Traffic Delay: 94.9 pcuHr

Note:  
 Site observation show that two opposed right-turning vehciels can store in the junction without blocking other traffic, in both NB and SB directions. However this relies on drivers making the most of the available road width. Therefore, the model assumes a non-blocking storage of 1.5 PCUs



Basic Results Summary

**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network: Staplehurst</b>	-	-	-		-	-	-	-	-	-	110.2%	234	0	24	94.9	-	-
<b>Staplehurst</b>	-	-	-		-	-	-	-	-	-	110.2%	234	0	24	94.9	-	-
1/1	A229 Station Road Left Ahead Right	O	A		2	107	-	713	1914	998	71.5%	81	0	24	4.8	24.5	18.1
2/1	Headcorn Rd Right Left Ahead	U	D		1	28	-	272	1703	247	110.2%	-	-	-	26.0	343.5	34.3
3/1	A229 High Street Ahead Right Left	O	B		2	106	-	789	1889	738	107.0%	152	0	0	44.6	203.5	61.5
4/1	Maiden Rd Left Ahead Right	U	C		1	22	-	217	1740	200	108.4%	-	-	-	19.5	323.2	25.7
		C1			PRC for Signalled Lanes (%):		-22.4			Total Delay for Signalled Lanes (pcuHr):		94.89			Cycle Time (s):		200
					PRC Over All Lanes (%):		-22.4			Total Delay Over All Lanes(pcuHr):		94.89					

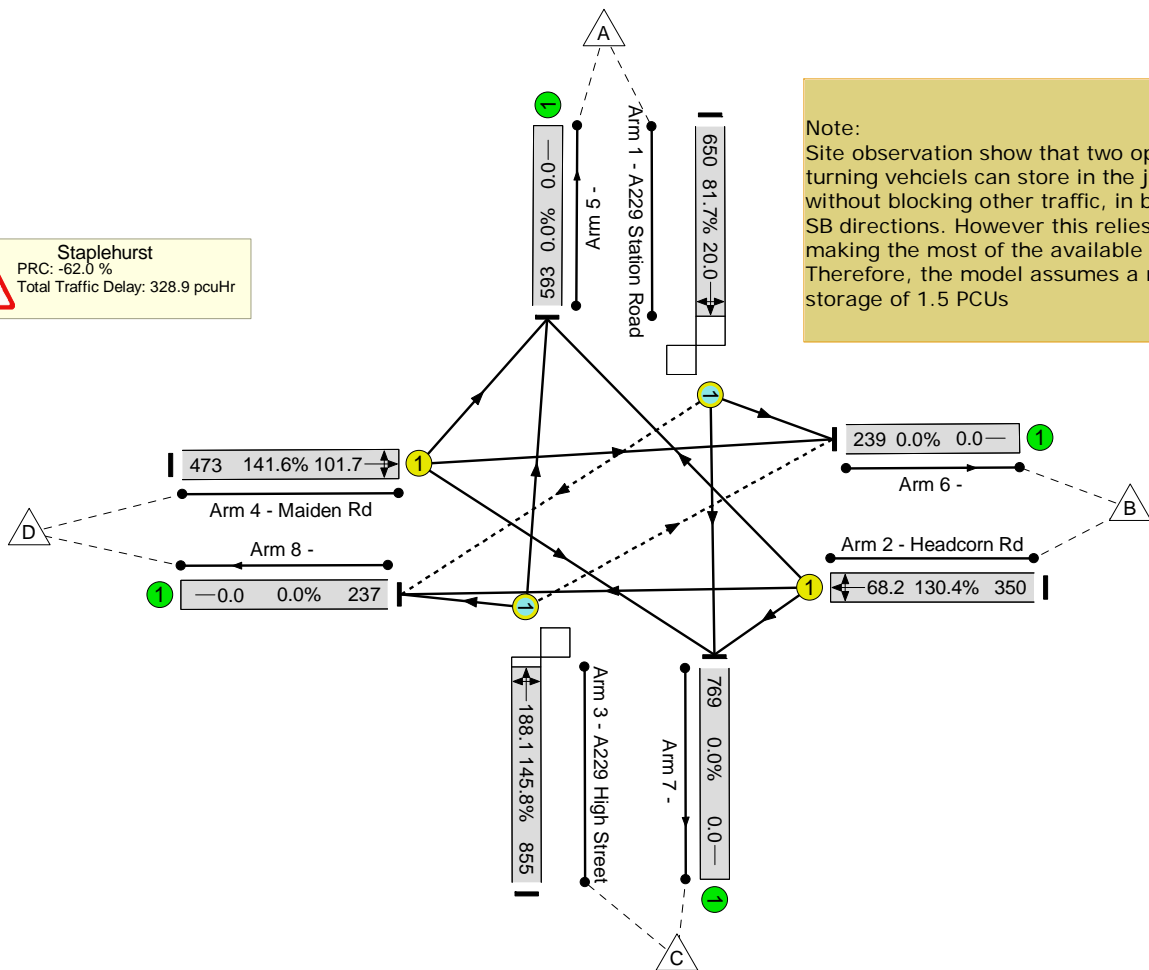
Basic Results Summary

Scenario 5: '2031 Design AM' (FG5: '2031 Design AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram

Staplehurst  
 PRC: -62.0 %  
 Total Traffic Delay: 328.9 pcuHr

Note:  
 Site observation show that two opposed right-turning vehciels can store in the junction without blocking other traffic, in both NB and SB directions. However this relies on drivers making the most of the available road width. Therefore, the model assumes a non-blocking storage of 1.5 PCUs





Basic Results Summary

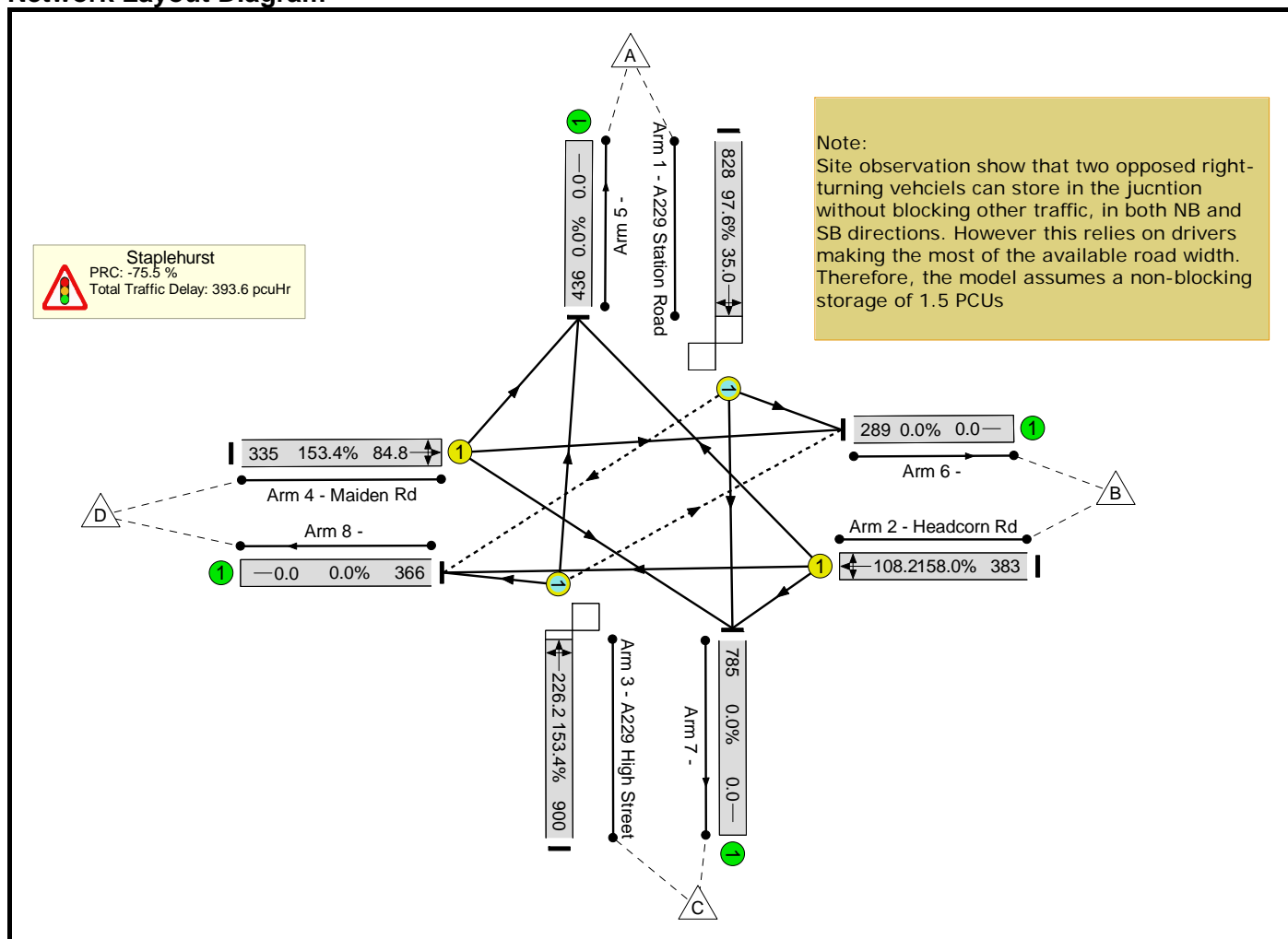
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network: Staplehurst</b>	-	-	-		-	-	-	-	-	-	145.8%	162	0	25	328.9	-	-
<b>Staplehurst</b>	-	-	-		-	-	-	-	-	-	145.8%	162	0	25	328.9	-	-
1/1	A229 Station Road Left Ahead Right	O	A		2	76	-	650	1926	795	81.7%	74	0	14	6.7	36.9	20.0
2/1	Headcorn Rd Right Left Ahead	U	D		1	27	-	350	1725	268	130.4%	-	-	-	58.7	603.7	68.2
3/1	A229 High Street Ahead Right Left	O	B		2	75	-	855	1910	586	145.8%	88	0	11	172.3	725.3	188.1
4/1	Maiden Rd Left Ahead Right	U	C		1	34	-	473	1718	334	141.6%	-	-	-	91.3	695.0	101.7
		C1			PRC for Signalled Lanes (%):		-62.0			Total Delay for Signalled Lanes (pcuHr):		328.93			Cycle Time (s):		180
					PRC Over All Lanes (%):		-62.0			Total Delay Over All Lanes(pcuHr):		328.93					

Basic Results Summary

Scenario 6: '2031 Design PM' (FG6: '2031 Design PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network: Staplehurst</b>	-	-	-		-	-	-	-	-	-	158.0%	241	0	60	393.6	-	-
<b>Staplehurst</b>	-	-	-		-	-	-	-	-	-	158.0%	241	0	60	393.6	-	-
1/1	A229 Station Road Left Ahead Right	O	A		2	106	-	828	1896	849	97.6%	135	0	31	15.7	68.3	35.0
2/1	Headcorn Rd Right Left Ahead	U	D		1	27	-	383	1732	242	158.0%	-	-	-	96.8	910.0	108.2
3/1	A229 High Street Ahead Right Left	O	B		2	105	-	900	1875	587	153.4%	106	0	29	202.6	810.5	226.2
4/1	Maiden Rd Left Ahead Right	U	C		1	24	-	335	1747	218	153.4%	-	-	-	78.5	843.1	84.8
		C1			PRC for Signalled Lanes (%):		-75.5			Total Delay for Signalled Lanes (pcuHr):		393.59			Cycle Time (s):		200
					PRC Over All Lanes (%):		-75.5			Total Delay Over All Lanes(pcuHr):		393.59					

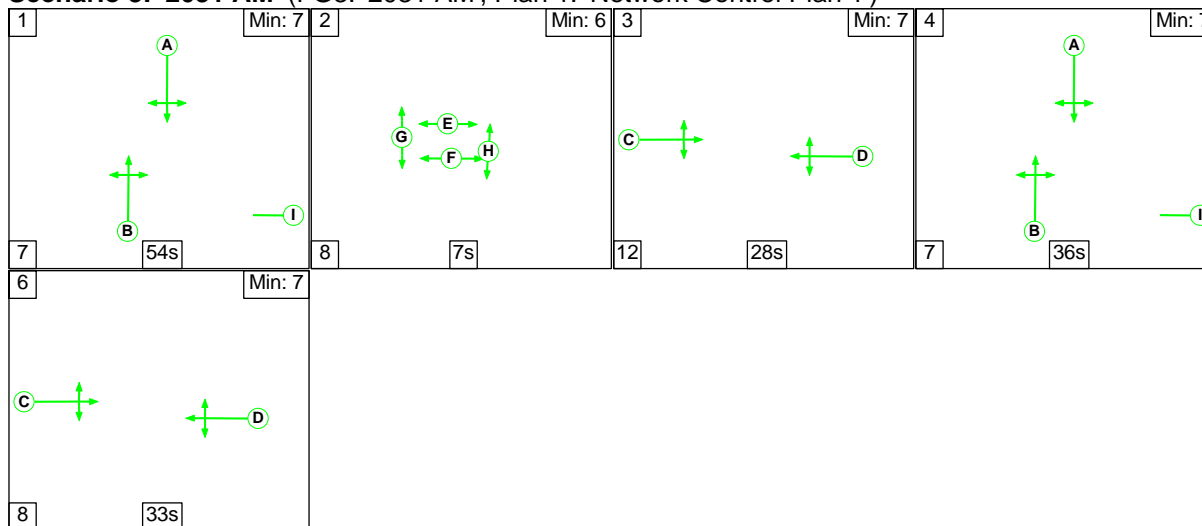
Basic Results Summary  
**Basic Results Summary**

**User and Project Details**

<b>Project:</b>	<b>Maidstone BC Junction Assessments</b>
<b>Title:</b>	<b>Staplehurst</b>
<b>Location:</b>	Maidstone
<b>File name:</b>	Staplehurst_2031_A.lsg3x
<b>Author:</b>	BR
<b>Company:</b>	Mott MacDonald
<b>Address:</b>	Stoneham Lane, Southampton SO50 9NW
<b>Notes:</b>	Flares on all approaches Ped running every alternate cycle

**Stage Sequence Diagram**

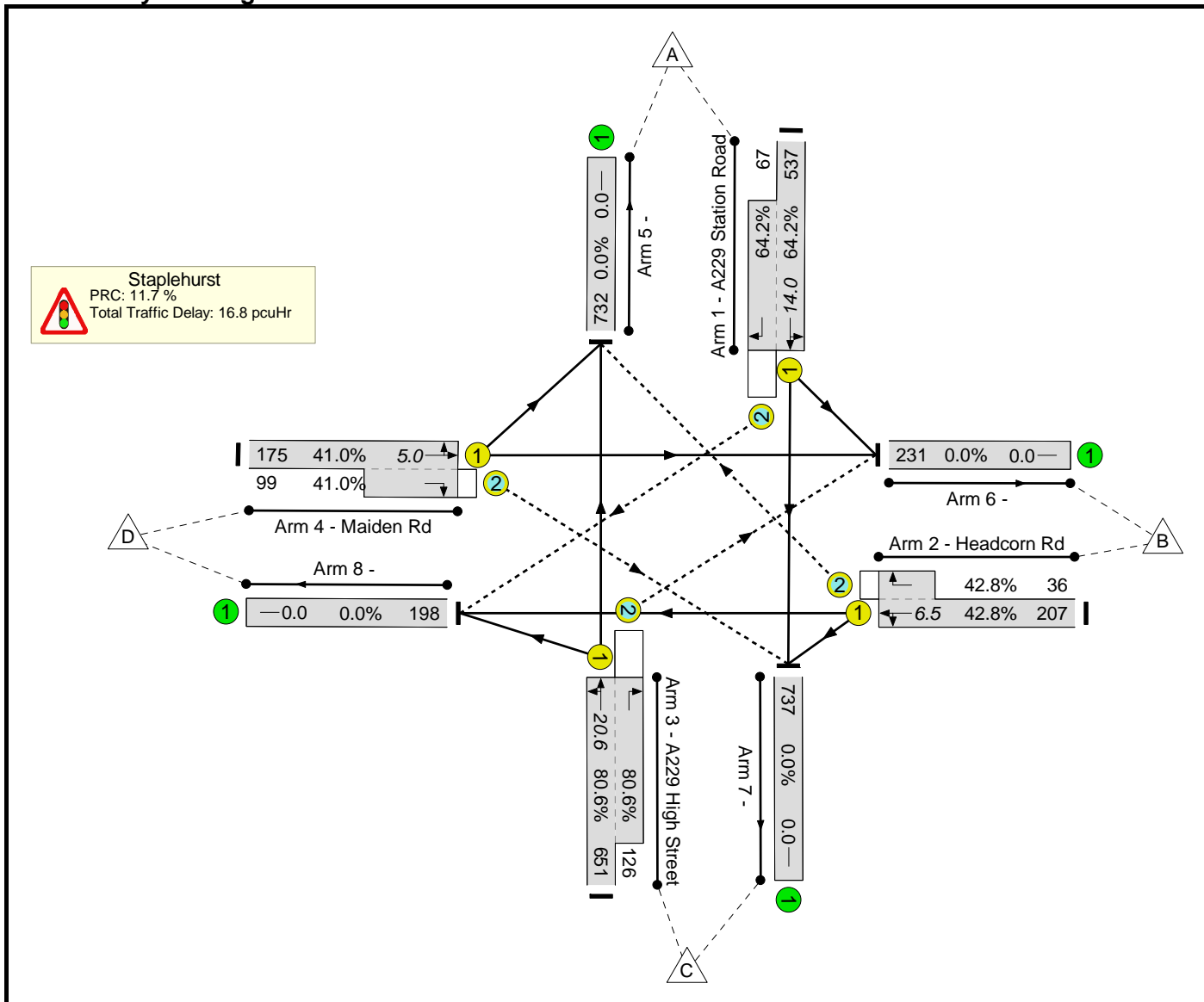
**Scenario 3: '2031 AM'** (FG3: '2031 AM', Plan 1: 'Network Control Plan 1')



Basic Results Summary

Scenario 3: '2031 AM' (FG3: '2031 AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

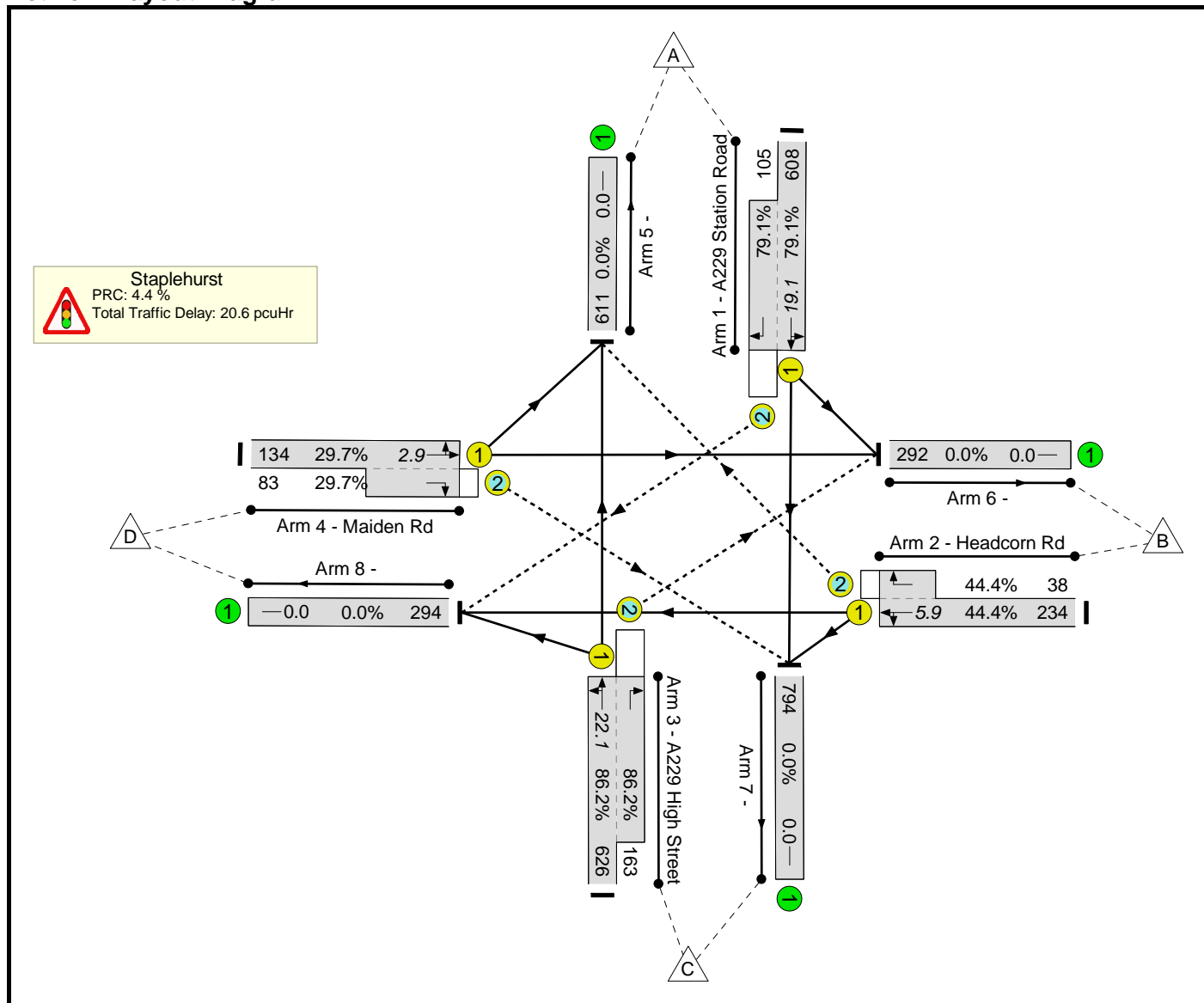
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)			
<b>Network: Staplehurst</b>	-	-	-		-	-	-	-	-	-	<b>80.6%</b>	<b>289</b>	<b>9</b>	<b>30</b>	<b>16.8</b>	-	-			
<b>Staplehurst</b>	-	-	-		-	-	-	-	-	-	<b>80.6%</b>	<b>289</b>	<b>9</b>	<b>30</b>	<b>16.8</b>	-	-			
1/1+1/2	A229 Station Road Left Ahead Right	U+O	A		2	92	-	604	1964:1687	837+104	64.2 : 64.2%	43	0	24	4.6	27.1	14.0			
2/1+2/2	Headcorn Rd Right Left Ahead	U+O	D		2	61	-	243	1733:1707	484+84	42.8 : 42.8%	36	0	0	2.3	34.7	6.5			
3/1+3/2	A229 High Street Ahead Right Left	U+O	B	J	2	90	0	777	1958:1687	808+156	80.6 : 80.6%	119	0	7	7.2	33.5	20.6			
4/1+4/2	Maiden Rd Left Ahead Right	U+O	C		2	63	-	274	1719:1707	426+241	41.0 : 41.0%	90	9	0	2.7	35.0	5.0			
		C1	PRC for Signalled Lanes (%):		11.7		PRC Over All Lanes (%):		11.7		Total Delay for Signalled Lanes (pcuHr):		16.79		Total Delay Over All Lanes(pcuHr):		16.79		Cycle Time (s): 200	

Basic Results Summary

Scenario 4: '2031 PM' (FG4: '2031 PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

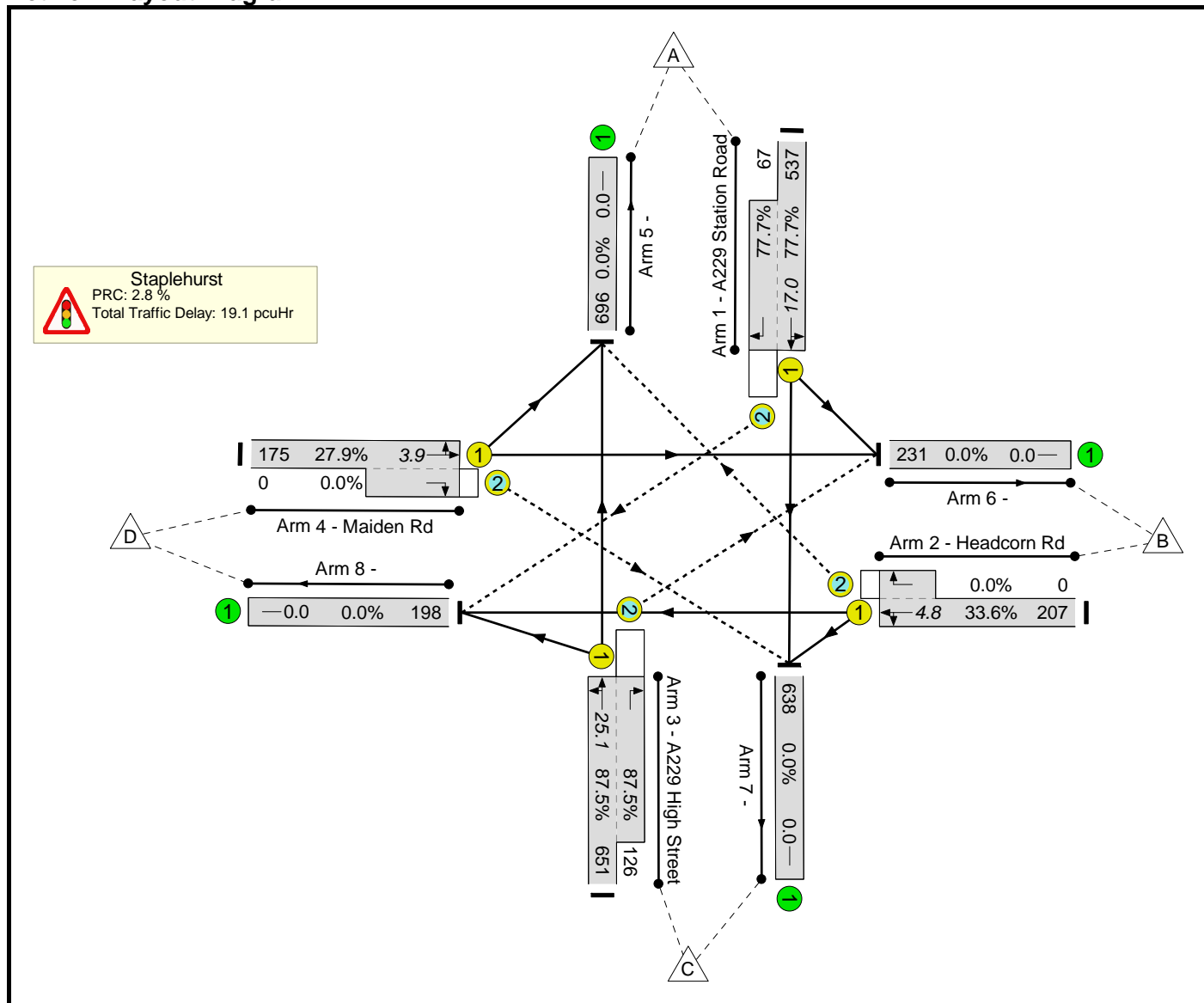
Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)			
<b>Network: Staplehurst</b>	-	-	-		-	-	-	-	-	-	<b>86.2%</b>	<b>314</b>	<b>8</b>	<b>67</b>	<b>20.6</b>	-	-			
<b>Staplehurst</b>	-	-	-		-	-	-	-	-	-	<b>86.2%</b>	<b>314</b>	<b>8</b>	<b>67</b>	<b>20.6</b>	-	-			
1/1+1/2	A229 Station Road Left Ahead Right	U+O	A		2	89	-	713	1950:1687	768+133	79.1 : 79.1%	80	0	25	7.1	36.0	19.1			
2/1+2/2	Headcorn Rd Right Left Ahead	U+O	D		2	68	-	272	1724:1707	527+86	44.4 : 44.4%	38	0	0	2.3	31.0	5.9			
3/1+3/2	A229 High Street Ahead Right Left	U+O	B	J	2	87	0	789	1939:1687	726+189	86.2 : 86.2%	121	0	42	9.3	42.5	22.1			
4/1+4/2	Maiden Rd Left Ahead Right	U+O	C		2	70	-	217	1769:1707	451+279	29.7 : 29.7%	75	8	0	1.8	29.7	2.9			
		C1	PRC for Signalled Lanes (%):		4.4		PRC Over All Lanes (%):		4.4		Total Delay for Signalled Lanes (pcuHr):		20.57		Total Delay Over All Lanes(pcuHr):		20.57		Cycle Time (s): 204	



Basic Results Summary

Scenario 5: '2031 AM Alt1' (FG3: '2031 AM', Plan 2: 'Network Control Plan 2')

Network Layout Diagram



Basic Results Summary

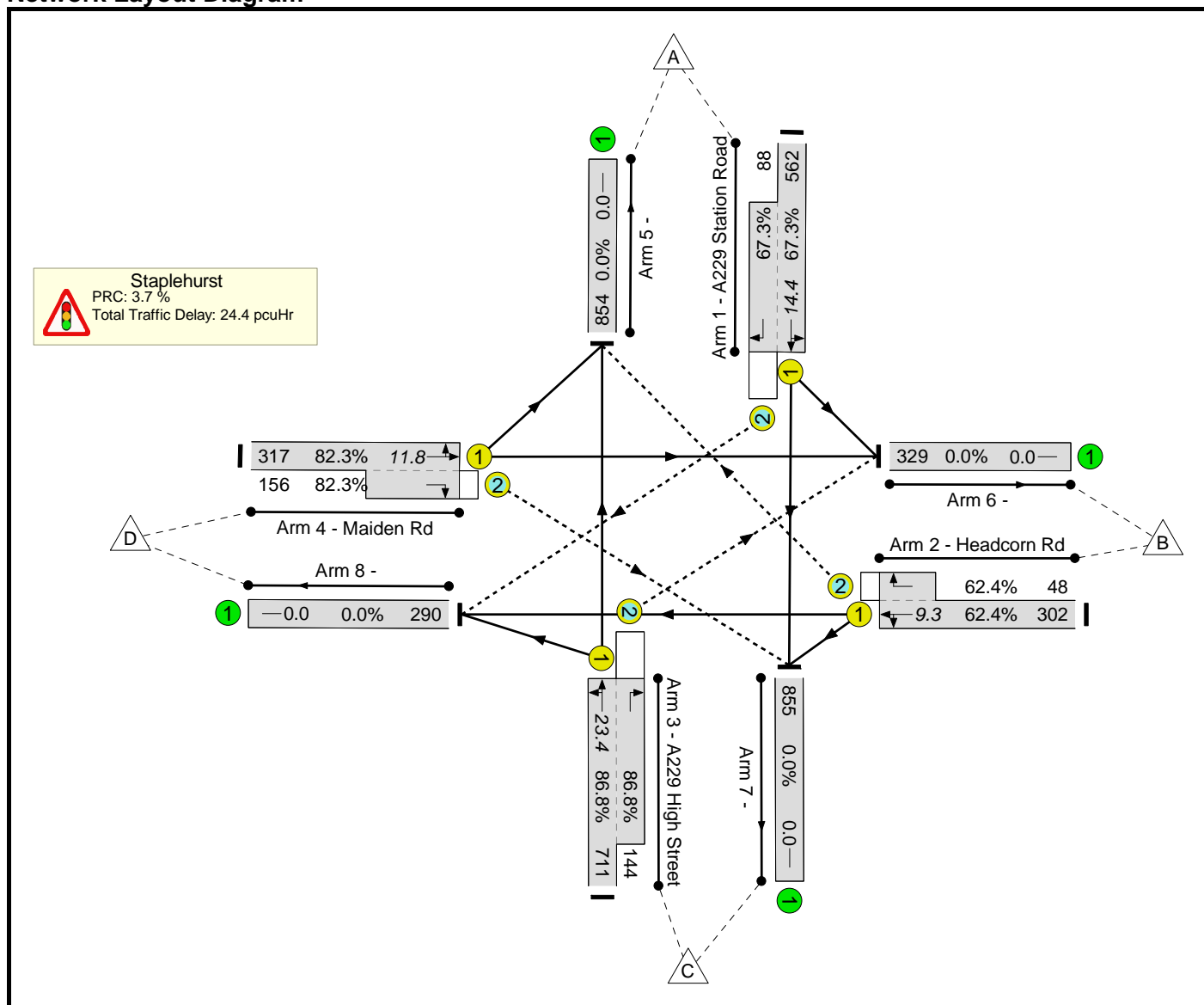
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network: Staplehurst</b>	-	-	-		-	-	-	-	-	-	87.5%	141	32	20	19.1	-	-
<b>Staplehurst</b>	-	-	-		-	-	-	-	-	-	87.5%	141	32	20	19.1	-	-
1/1+1/2	A229 Station Road Left Ahead Right	U+O	A		2	75	-	604	1964:1687	691+86	77.7 : 77.7%	50	0	17	6.6	39.4	17.0
2/1+2/2	Headcorn Rd Right Left Ahead	U+O	D		2	69	-	207	1733:1940	615+0	33.6 : 0.0%	0	0	0	1.6	28.2	4.8
3/1+3/2	A229 High Street Ahead Right Left	U+O	B	J	2	82	4	777	1958:1687	744+144	87.5 : 87.5%	91	32	3	9.5	44.2	25.1
4/1+4/2	Maiden Rd Left Ahead Right	U+O	C		2	71	-	175	1719:1940	627+0	27.9 : 0.0%	0	0	0	1.3	26.7	3.9
		C1			PRC for Signalled Lanes (%):		2.8	Total Delay for Signalled Lanes (pcuHr):				19.07	Cycle Time (s):		200		
					PRC Over All Lanes (%):		2.8	Total Delay Over All Lanes(pcuHr):				19.07					

Basic Results Summary

Scenario 7: '2031 Design AM' (FG5: '2031 Design AM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

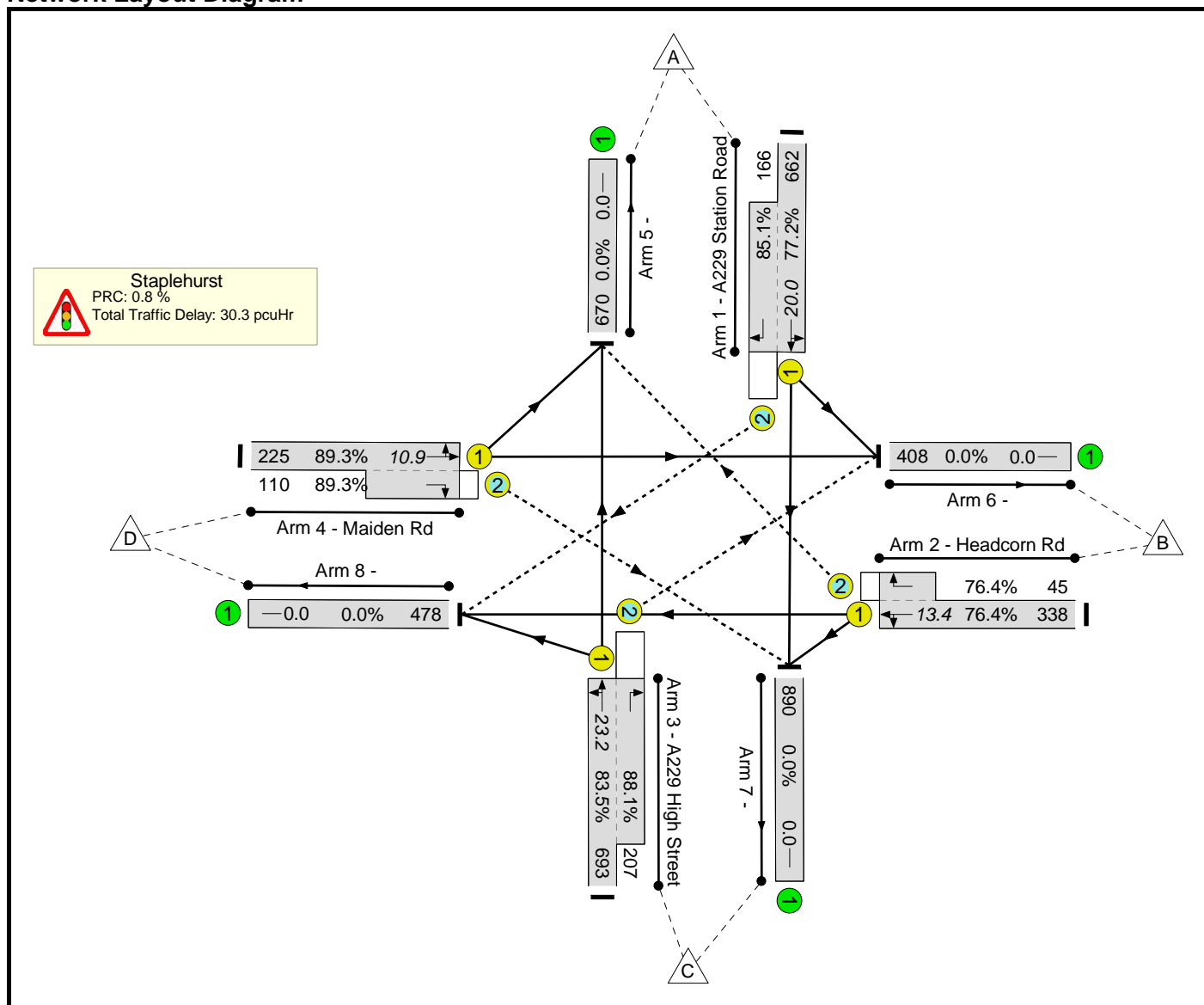
**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network: Staplehurst</b>	-	-	-		-	-	-	-	-	-	<b>86.8%</b>	<b>380</b>	<b>9</b>	<b>47</b>	<b>24.4</b>	-	-
<b>Staplehurst</b>	-	-	-		-	-	-	-	-	-	<b>86.8%</b>	<b>380</b>	<b>9</b>	<b>47</b>	<b>24.4</b>	-	-
1/1+1/2	A229 Station Road Left Ahead Right	U+O	A		2	94	-	650	1960:1687	835+131	67.3 : 67.3%	54	0	34	5.1	28.1	14.4
2/1+2/2	Headcorn Rd Right Left Ahead	U+O	D		2	60	-	350	1749:1707	484+77	62.4 : 62.4%	48	0	0	3.8	38.9	9.3
3/1+3/2	A229 High Street Ahead Right Left	U+O	B	J	2	92	0	855	1954:1687	819+166	86.8 : 86.8%	136	0	8	9.0	37.9	23.4
4/1+4/2	Maiden Rd Left Ahead Right	U+O	C		2	62	-	473	1731:1707	385+190	82.3 : 82.3%	142	9	5	6.5	49.8	11.8
		C1			PRC for Signalled Lanes (%):		3.7	Total Delay for Signalled Lanes (pcuHr):		24.39		Cycle Time (s):		200			
					PRC Over All Lanes (%):		3.7	Total Delay Over All Lanes(pcuHr):		24.39							

Basic Results Summary

Scenario 8: '2031 Design PM' (FG6: '2031 Design PM', Plan 1: 'Network Control Plan 1')

Network Layout Diagram



Basic Results Summary

**Network Results**

Item	Lane Description	Lane Type	Full Phase	Arrow Phase	Num Greens	Total Green (s)	Arrow Green (s)	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Turners In Gaps (pcu)	Turners When Unopposed (pcu)	Turners In Intergreen (pcu)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
<b>Network: Staplehurst</b>	-	-	-		-	-	-	-	-	-	<b>89.3%</b>	<b>423</b>	<b>8</b>	<b>98</b>	<b>30.3</b>	-	-
<b>Staplehurst</b>	-	-	-		-	-	-	-	-	-	<b>89.3%</b>	<b>423</b>	<b>8</b>	<b>98</b>	<b>30.3</b>	-	-
1/1+1/2	A229 Station Road Left Ahead Right	U+O	A		2	115	-	828	1942:1687	858+195	77.2 : 85.1%	126	0	40	7.5	32.5	20.0
2/1+2/2	Headcorn Rd Right Left Ahead	U+O	D		2	59	-	383	1757:1707	442+59	76.4 : 76.4%	45	0	0	5.6	52.4	13.4
3/1+3/2	A229 High Street Ahead Right Left	U+O	B	J	2	113	0	900	1928:1687	830+235	83.5 : 88.1%	166	0	41	9.1	36.4	23.2
4/1+4/2	Maiden Rd Left Ahead Right	U+O	C		2	61	-	335	1775:1707	252+123	89.3 : 89.3%	86	8	16	8.2	88.0	10.9
		C1			PRC for Signalled Lanes (%):		0.8	Total Delay for Signalled Lanes (pcuHr):				30.34	Cycle Time (s):		220		
					PRC Over All Lanes (%):		0.8	Total Delay Over All Lanes(pcuHr):				30.34					