



# Bromley Farm Quarry, Upper Cumberworth

## Transport Statement Addendum No2

January 2025

Project number 2074C

---

Paragon Highways  
Peach House West, The Walled Garden,  
Nostell Estate, Wakefield WF4 1AB

☎ 01924 291536

✉ [mail@paragonhighways.com](mailto:mail@paragonhighways.com)  
[paragonhighways.com](http://paragonhighways.com)



## Quality Management

|             | First Issue  | Revision 1 | Revision 2 | Revision 3 |
|-------------|--------------|------------|------------|------------|
| Remarks     | Final report |            |            |            |
| Date        | Jan 2025     |            |            |            |
| Prepared by | LJO          |            |            |            |
| Checked by  | AH           |            |            |            |

This document is issued for the party which commissioned it and for specific purposes connected with the above-captioned project only. It should not be relied upon by any other party or used for any other purpose.

We accept no responsibility for the consequences of this document being relied upon by any other party, or being used for any other purpose, or containing any error or omission which is due to an error or omission in data supplied to us by other parties.

This document should not be shown to other parties without consent from us and from the party which commissioned it.

---

## Contents

|     |                                    |   |
|-----|------------------------------------|---|
| 1.0 | Introduction .....                 | 4 |
| 2.0 | Traffic Surveys .....              | 5 |
| 3.0 | Development Traffic .....          | 6 |
| 4.0 | Junction Capacity Assessment ..... | 7 |

## Appendices

|            |                            |
|------------|----------------------------|
| Appendix A | Traffic Surveys            |
| Appendix B | HGV Routing Plan           |
| Appendix C | Traffic Flows              |
| Appendix D | Junction Geometry          |
| Appendix E | PICADY Output – A629/ A635 |
| Appendix F | PICADY Output – A635/ A616 |

## **1.0 Introduction**

- 1.1 Paragon Highways have been appointed to prepare this Addendum No2 to the Transport Statement dated October 2022 in relation to the proposal to extend quarry operations on land at Bromley Farm Quarry, Upper Cumberworth.
- 1.2 This Addendum provides further information as a result of the Council's highway consultation response dated 12<sup>th</sup> September 2024. As a result of the Council's response, it is necessary to provide further clarification on traffic numbers and to clarify the HGV routing from Bromley Farm Quarry to the destination at Hazelhead Works.
- 1.3 The response raised concerns with the traffic surveys and validation, it has been agreed with the Council's Highways Officer that the A635/ A629 staggered crossroads at Shepley be formally assessed again including queue length surveys to validate the traffic survey data. Additionally given the amended HGV routing from the site agreed with the Council's Highways Officer, it has also been necessary to provide an assessment at the A635/ A616 junction at New Mill, which also included queue length surveys for validation purposes.
- 1.4 This report addresses the comments raised by the Council's Highways Officer so that the proposals are suitable for planning approval purposes.

---

## 2.0 Traffic Surveys

- 2.1 To assess junction performance, it has been necessary to provide an updated independent traffic survey at the A635 Barnsley Road/ A629 Penistone Road junction at Shepley and at the A635 Holmfirth Road/ A616 Huddersfield Road junction at New Mill. The traffic surveys were carried out on the 6<sup>th</sup> November 2024 between 0700hrs and 0930hrs and between 1600hrs and 1830hrs for both the Shepley and New Mill junctions. The Shepley junction also include movements to and from the petrol filling station. The traffic surveys revealed that for both junctions the morning peak hours were between 0730hrs and 0830hrs and for the evening peak between 1645hrs and 1745hrs. The survey information can be found at Appendix A.
- 2.2 To validate the junction model, it has also been necessary to provide queue length surveys at the Shepley and New Mill junctions. The queue length surveys were also carried out on the 6<sup>th</sup> November 2024 between 0700hrs and 0930hrs and between 1600hrs and 1830hrs.
- 2.3 From the queue length surveys the average maximum queue lengths can be established for both junctions. For the A635/ A629 junction at Shepley the A635 Barnsley Road arm has an average maximum queue length of 5.4PCU and 8.4PCU for the morning and evening peaks respectively. The A635 Holmfirth Road arm has an average maximum queue length of 11.0PCU and 12.0PCU for the morning and evening peaks respectively.
- 2.4 For the A635/ A616 junction at New Mill the A635 Penistone Road arm has an average maximum queue length of 13.1PCU and 15.3PCU for the morning and evening peaks respectively. The A616 Huddersfield Road arm has an average maximum queue length of 7.3PCU and 6.8PCU for the morning and evening peaks respectively. The queue length survey information can also be found at Appendix A.
- 2.5 The peak hour volumes and also average maximum queue lengths have been used for the junction capacity assessments within section 4 of this report.

---

### **3.0 Development Traffic**

#### **3.1 Routing**

3.2 The proposed HGV routing between the site at Bromley Farm Quarry and Hazelhead Works previously included local roads from the A629 Penistone Road/ A635 Holmfirth Road staggered crossroads along the A629, Cumberworth Lane, Park Head Lane, Haddingley Lane, Slack Top Lane, Hog Close Lane, Wood Royd Hill Lane and the A616 Sheffield Road. The Council's Highways Officer has advised of concerns of using the local roads to access the Hazelhead Works site.

3.3 Subsequently, it has been agreed that the HGV routing between Bromley Farm Quarry and the Hazelhead Works be amended to include the principal road network. The amended HGV route between the site and Hazelhead Works includes the A635 Barnsley Road, A629 Penistone Road, A635 Holmfirth Road, A635 Penistone Road, and the A616 Sheffield Road. The HGV routing plan can be found at Appendix B.

#### **3.4 Proposed Development Traffic**

3.5 The extension of quarry operations would increase the maximum HGV trip generation by 120 HGVs per day (60 in and 60 out), which would be evenly spread out throughout the day. This traffic generation also takes into account any coal extraction from the site (although the number of HGV movements transporting coal would be very low). Based on the proposed operating times (between 7:30am and 6pm) the site would generate around 6 HGV trips entering the site and 6 HGV trips leaving the site during each of the peak hours.

3.6 For the purpose of junction capacity assessment, these additional trips have been converted to PCU (OGV2), which provides a PCU increase of 14 trips entering the site and 14 trips leaving the site (based on a conversion factor of 2.3).

3.7 The proposed traffic flows can be found at Appendix C.

---

## 4.0 Junction Capacity Assessment

4.1 It has been agreed with the Council's Highways Officer that for each junction capacity assessment the model will be run using standard parameters and also using custom stream intercept adjustments so that the junction capacity model replicates the average maximum queue lengths identified as part of the queue length surveys.

4.2 The geometry used for the capacity assessments for each junction is shown at Appendix D.

### A629 Penistone Road/ A635 Holmfirth Road

4.3 A capacity assessment has been carried out for the A635/ A629 junction using the PICADY computer program. We have modelled the junction in the morning peak and evening peak periods for both the base year (2024) with and without development traffic.

4.4 The results of the PICADY assessment for the base conditions are included at Appendix E and are summarised in the table below.

|                                           | AM Peak |           | PM Peak |           |
|-------------------------------------------|---------|-----------|---------|-----------|
|                                           | Max RFC | Max Queue | Max RFC | Max Queue |
| 2024 Base                                 |         |           |         |           |
| A635 Holmfirth Rd<br>Left Turn Ahead      | 0.17    | 0.2       | 0.09    | 0.1       |
| A635 Holmfirth Rd<br>Right Turn Ahead     | 0.82    | 4.2       | 0.63    | 1.8       |
| A629 Lane Head Rd<br>Right Turn to PFS    | 0.05    | 0.1       | 0.04    | 0.1       |
| PFS<br>Left and Right Turn                | 0.09    | 0.1       | 0.10    | 0.1       |
| A629 Lane Head Rd<br>Right Turn to A635   | 0.12    | 0.1       | 0.10    | 0.1       |
| A635 Barnsley Road<br>Left Turn           | 0.06    | 0.1       | 0.05    | 0.1       |
| A635 Barnsley Road<br>Right Turn          | 0.48    | 1.0       | 0.63    | 1.8       |
| A629 Penistone Road<br>Right Turn to A635 | 0.07    | 0.1       | 0.04    | 0.0       |

**Table 1: PICADY – A635/ A629 Junction 2024 Base**

- 4.5 From the above analyses it can be seen that the junction operates within the normal requirements for the Ratio of Flow to Capacity (RFC value less than 0.85) during the 2024 base flow scenario in the weekday AM and PM peak periods. Traffic turning right from the A635 Holmfirth Road shows an RFC of 0.82 and queue length of over 4 PCUs.
- 4.6 The results of the PICADY assessment for the 2024 'with development' scenario are included at Appendix E and are summarised in the table below: -

|                                           | AM Peak |           | PM Peak |           |
|-------------------------------------------|---------|-----------|---------|-----------|
|                                           | Max RFC | Max Queue | Max RFC | Max Queue |
| 2024 Base                                 |         |           |         |           |
| A635 Holmfirth Rd<br>Left Turn Ahead      | 0.26    | 0.4       | 0.11    | 0.1       |
| A635 Holmfirth Rd<br>Right Turn Ahead     | 0.86    | 5.5       | 0.68    | 2.2       |
| A629 Lane Head Rd<br>Right Turn to PFS    | 0.05    | 0.1       | 0.05    | 0.1       |
| PFS<br>Left and Right Turn                | 0.09    | 0.1       | 0.10    | 0.1       |
| A629 Lane Head Rd<br>Right Turn to A635   | 0.12    | 0.1       | 0.10    | 0.1       |
| A635 Barnsley Road<br>Left Turn           | 0.06    | 0.1       | 0.06    | 0.1       |
| A635 Barnsley Road<br>Right Turn          | 0.52    | 1.2       | 0.68    | 2.2       |
| A629 Penistone Road<br>Right Turn to A635 | 0.07    | 0.1       | 0.04    | 0.0       |

**Table 2: PICADY – A635/ A629 Junction 2024 With Development**

- 4.7 From the above analyses it can be seen that the junction will operate within the normal requirements for the Ratio of Flow to Capacity (RFC value less than 0.85) during the 2024 'with development' scenario for all arms other than the A635 Holmfirth Road arm, specifically the right turn where the RFC increases to 0.86 (increasing RFC by 0.04). The queue length increases by 1.3PCU as a result. The introduction of HGV traffic associated with the development would not have a noticeable impact at on the capacity of the junction, which would still operate within its theoretical capacity, and slightly over normal requirements.

- 4.8 To provide a sensitivity test the Council have requested that the junction model be adjusted to accord with the maximum average queue lengths observed as part of the queue length survey, specifically for the A635 Barnsley Road and A635 Holmfirth Road arms of the junction. Therefore, custom stream intercept adjustments have been made to the model, and for the A635 Barnsley Road arm an intercept adjustment of -186pcu/hr and -119pcu/hr have been made for morning and evening peaks respectively. Similarly, for the A635 Holmfirth Road arm of the junction the intercept adjustments of -61pcu/hr and -144pcu/hr have been made for the morning and evening peak hours respectively.
- 4.9 The results of the PICADY assessment for the base conditions using the custom stream intercept adjustments are also included at Appendix E and are summarised in the table below: -

|                                                 | AM Peak |           | PM Peak |           |
|-------------------------------------------------|---------|-----------|---------|-----------|
|                                                 | Max RFC | Max Queue | Max RFC | Max Queue |
| 2024 Base - Custom Stream Intercept Adjustments |         |           |         |           |
| A635 Holmfirth Rd<br>Left Turn Ahead            | 0.99    | 2.2       | 1.03    | 2.7       |
| A635 Holmfirth Rd<br>Right Turn Ahead           | 0.98    | 11.0      | 1.02    | 12.0      |
| A629 Lane Head Rd<br>Right Turn to PFS          | 0.05    | 0.1       | 0.04    | 0.1       |
| PFS<br>Left and Right Turn                      | 0.09    | 0.1       | 0.10    | 0.1       |
| A629 Lane Head Rd<br>Right Turn to A635         | 0.12    | 0.1       | 0.10    | 0.1       |
| A635 Barnsley Road<br>Left Turn                 | 0.30    | 0.4       | 0.90    | 1.7       |
| A635 Barnsley Road<br>Right Turn                | 0.87    | 5.3       | 0.95    | 8.5       |
| A629 Penistone Road<br>Right Turn to A635       | 0.07    | 0.1       | 0.04    | 0.0       |

**Table 3: PICADY – A635/A629 Junction 2024 Base Adjusted for Queue Lengths**

- 4.10 As can be seen from the table above the A635 Holmfirth Road arm of the junction struggles to cope with the existing traffic volumes recorded on the survey date, with the RFC exceeding 0.85, and in the PM also exceeding the theoretical capacity of the junction. The average maximum queues of between 11 and 12 PCUs during each of the network peak hours are identified for the A635 Holmfirth Road arm.
- 4.11 It can also be seen that to some degree the A635 Barnsley Road arm also struggles with an RFC of 0.87 (exceeding normal requirements of 0.85) although this value is within the junction theoretical capacity. It is also noted that the average maximum queue lengths were between 5.3PCUs and 8.5PCUs during the network peak hours.

- 4.12 It should be considered that traffic queues were observed on one day only, which can be unreliable because queue lengths have a large daily variability even with the same levels of traffic demand. The queues shown within the PICADY model are what you would expect to see if you averaged observations from many days.
- 4.13 The results of the PICADY assessment for the 2024 'with development' scenario using the custom stream intercept adjustments are included at Appendix E and are summarised in the table below.

|                                                                     | AM Peak |           | PM Peak |           |
|---------------------------------------------------------------------|---------|-----------|---------|-----------|
|                                                                     | Max RFC | Max Queue | Max RFC | Max Queue |
| 2024 With Development Traffic - Custom Stream Intercept Adjustments |         |           |         |           |
| A635 Holmfirth Rd<br>Left Turn Ahead                                | 1.05    | 2.4       | 1.11    | 3.1       |
| A635 Holmfirth Rd<br>Right Turn Ahead                               | 1.04    | 15.8      | 1.09    | 17.7      |
| A629 Lane Head Rd<br>Right Turn to PFS                              | 0.05    | 0.1       | 0.05    | 0.1       |
| PFS<br>Left and Right Turn                                          | 0.09    | 0.1       | 0.10    | 0.1       |
| A629 Lane Head Rd<br>Right Turn to A635                             | 0.12    | 0.1       | 0.10    | 0.1       |
| A635 Barnsley Road<br>Left Turn                                     | 0.92    | 2.2       | 1.05    | 2.1       |
| A635 Barnsley Road<br>Right Turn                                    | 0.95    | 8.0       | 1.03    | 12.9      |
| A629 Penistone Road<br>Right Turn to A635                           | 0.07    | 0.1       | 0.04    | 0.0       |

**Table 4: A635/ A629 Junction 2024 With Development Adjusted for Queue Lengths**

- 
- 4.14 As can be seen from the table above, the introduction of development traffic during the AM has increased the RFC by 0.06 on the A635 Holmfirth Road arm and exceeds junction capacity in terms of RFC by 0.05 RFC. The impact would likely increase queue lengths by around 4 to 5 PCUs, which is not considered to be severe. For the PM period, RFC rises by 0.07 increasing queue lengths by up to 5 PCUs, again this increase as a result of the development traffic is not considered to be severe.
- 4.15 It can also be seen that the development traffic would increase the RFC at the A635 Barnsley Road arm during the AM period by 0.07 for right turning traffic. Left turning traffic would also see a rise in RFC. It should be noted that RFC for the A635 Barnsley Road would still be below the theoretical capacity of the junction with development traffic adding around 5 PCUs to the average maximum queues. For the PM period the development traffic increased RFC at the A635 Barnsley Road arm by 0.08 and 0.15 for the right and left turn respectively, with the latter having minimal impact on queue lengths. For right turning traffic, the introduction of development traffic would result in an average maximum queue length increase of around 4 PCUs. The increases in the average maximum queue lengths are therefore not considered to be severe.
- 4.16 The existing junction performance is close to theoretical capacity and sometimes exceeds theoretical capacity using the custom stream intercept adjustments, with any slight increase in traffic providing an exponential impact on traffic queues on the arms of the junction. Whilst this is a sensitivity test, the assessment identifies that the development traffic would not have a severe impact on the average maximum queues at this junction.

A635 Penistone Road/ A616 Sheffield Road/ A616 Huddersfield Road

- 4.17 A capacity assessment has been carried out for the A635/ A616 junction using the PICADY computer program. We have modelled the junction in the morning peak and evening peak periods for both the base year (2024) with and without development traffic.

- 4.18 The results of the PICADY assessment for the base conditions are included at Appendix F and are summarised in the table below.

|                                             | AM Peak |           | PM Peak |           |
|---------------------------------------------|---------|-----------|---------|-----------|
|                                             | Max RFC | Max Queue | Max RFC | Max Queue |
| 2024 Base                                   |         |           |         |           |
| A635 Penistone Rd<br>Left Turn              | 0.28    | 0.4       | 0.99    | 4.6       |
| A635 Penistone Rd<br>Right Turn             | 0.80    | 4.0       | 0.99    | 13.5      |
| A616 Sheffield Rd<br>Right Turn to A635     | 0.48    | 1.1       | 0.39    | 0.8       |
| A616 Huddersfield Rd<br>Left and Right Turn | 0.57    | 1.4       | 0.57    | 1.4       |
| A635 Penistone Rd<br>Right Turn to A616     | 0.60    | 2.4       | 0.54    | 2.0       |

**Table 5: A635/ A616 Junction 2024 Base**

- 4.19 From the above analyses it can be seen that the junction operates within the normal requirements for the Ratio of Flow to Capacity (RFC value less than 0.85) during the 2024 base flow scenario in the weekday AM and PM peak periods apart from the A635 Penistone Road arm at the A616 Sheffield Road junction during the PM peak period, where RFC is very close to theoretical capacity. Traffic waiting to turn onto the A616 Sheffield Road shows an RFC of 0.99 and a maximum average queue length of 4 PCUs during the AM peak and 13.5 PCUs during the PM peak periods.
- 4.20 The results of the PICADY assessment for the 2024 'with development' scenario are included at Appendix F and are summarised in the table below: -

|                                             | AM Peak |           | PM Peak |           |
|---------------------------------------------|---------|-----------|---------|-----------|
|                                             | Max RFC | Max Queue | Max RFC | Max Queue |
| 2024 With Development                       |         |           |         |           |
| A635 Penistone Rd<br>Left Turn              | 0.37    | 0.6       | 1.02    | 5.6       |
| A635 Penistone Rd<br>Right Turn             | 0.82    | 4.4       | 1.01    | 16.0      |
| A616 Sheffield Rd<br>Right Turn to A635     | 0.51    | 1.3       | 0.43    | 0.9       |
| A616 Huddersfield Rd<br>Left and Right Turn | 0.58    | 1.5       | 0.58    | 1.5       |
| A635 Penistone Rd<br>Right Turn to A616     | 0.61    | 2.6       | 0.55    | 2.1       |

**Table 6: A635/ A616 Junction 2024 With Development**

- 4.21 From the above analyses it can be seen that the junction operates within the normal requirements for the Ratio of Flow to Capacity (RFC value less than 0.85) during the 2024 base flow scenario in the weekday AM peak period. During the PM peak period the junction exceeds capacity at the A635 Penistone Road arm at the A616 Sheffield Road junction. Traffic waiting to turn onto the A616 Sheffield Road shows an RFC of 1.01 and 1.02 resulting in an increase in average maximum queues by around 3.5 PCUs, which is not considered to be severe.
- 4.22 To provide a sensitivity test the Council have requested that the junction model be adjusted to accord with the maximum average queue lengths observed as part of the queue length survey. Therefore, custom stream intercept adjustments have been made to the model, and for the A635 Penistone Road arm an intercept adjustment of -62pcu/hr and +10pcu/hr have been made for morning and evening peaks respectively. Similarly, for the A616 Huddersfield Road arm of the junction the intercept adjustments of -160pcu/hr and -168pcu/hr have been made for the morning and evening peak hours respectively.

- 4.23 The results of the PICADY assessment for the base conditions using the custom stream intercept adjustments are also included at Appendix F and are summarised in the table below: -

|                                                 | AM Peak |           | PM Peak |           |
|-------------------------------------------------|---------|-----------|---------|-----------|
|                                                 | Max RFC | Max Queue | Max RFC | Max Queue |
| 2024 Base – Custom Stream Intercept Adjustments |         |           |         |           |
| A635 Penistone Rd<br>Left Turn                  | 0.94    | 3.7       | 0.92    | 4.0       |
| A635 Penistone Rd<br>Right Turn                 | 0.95    | 9.5       | 0.96    | 11.3      |
| A616 Sheffield Rd<br>Right Turn to A635         | 0.48    | 1.1       | 0.39    | 0.8       |
| A616 Huddersfield Rd<br>Left and Right Turn     | 0.93    | 7.4       | 0.91    | 6.9       |
| A635 Penistone Rd<br>Right Turn to A616         | 0.60    | 2.4       | 0.54    | 2.0       |

**Table 7: A635/ A616 Junction 2024 Base Adjusted for Queue Lengths**

- 4.24 As can be seen from the table above the A635 Penistone Road arm of the junction struggles to cope with the existing traffic volumes recorded on the survey date, with the RFC exceeding normal requirements of 0.85, although the junction operates within theoretical capacity. The average queues of between 9.5 and 11.3 PCUs during each of the network peak hours can be observed. The A616 Huddersfield Road arm of the junction also exceeds an RFC of 0.85, again the junction still operates within theoretical capacity and has a queue length of between 6.9 PCU and 7.4 PCU.
- 4.25 It should be considered that traffic queues were observed on one day only, which can be unreliable because queue lengths have a large daily variability even with the same levels of traffic demand. The queues shown within the PICADY model are what you would expect to see if you averaged observations from many days.

- 4.26 The results of the PICADY assessment for the 2024 'with development' scenario using the custom stream intercept adjustments are included at Appendix F and are summarised in the table below: -

|                                                                     | AM Peak |           | PM Peak |           |
|---------------------------------------------------------------------|---------|-----------|---------|-----------|
|                                                                     | Max RFC | Max Queue | Max RFC | Max Queue |
| 2024 With Development Traffic – Custom Stream Intercept Adjustments |         |           |         |           |
| A635 Penistone Rd<br>Left Turn                                      | 0.99    | 4.9       | 0.99    | 5.2       |
| A635 Penistone Rd<br>Right Turn                                     | 0.98    | 11.6      | 0.99    | 13.8      |
| A616 Sheffield Rd<br>Right Turn to A635                             | 0.51    | 1.3       | 0.43    | 0.9       |
| A616 Huddersfield Rd<br>Left and Right Turn                         | 0.96    | 9.1       | 0.94    | 8.2       |
| A635 Penistone Rd<br>Right Turn to A616                             | 0.61    | 2.6       | 0.55    | 2.1       |

**Table 8: A635/ A616 Junction 2024 With Development Adjusted for Queue Lengths**

- 4.27 As can be seen from the table above, the introduction of development traffic during the AM peak period has increased the RFC by 0.05 on the A635 Penistone Road arm increasing the average maximum queue by 3 PCU. For the A616 Huddersfield arm during the AM peak period the development traffic increases the RFC by 0.03 and increases the average maximum queue by between 1 and 2 PCUs. With the inclusion of development traffic, the junction will operate within theoretical capacity.
- 4.28 For the PM peak period the A635 Penistone Road arm sees an increase in RFC from 0.96 to 0.99 and a maximum average queue length increase of between 3 and 4 PCUs. The A616 Huddersfield Road sees a small increase in RFC of 0.03 and a small increase in average maximum queue length of 1 PCU.

- 
- 4.29 Using both standard parameters and custom stream intercept adjustments, overall, the junction will operate within its theoretical capacity, and it can be seen from the small increases in RFC and average maximum queue lengths, that the development traffic does not have a significant impact on the operation of the junction. The impact would likely increase average maximum queue lengths by around 4 to 5 PCUs, which is not considered to be severe. For the PM period, RFC rises by 0.07 to 0.08 increasing average maximum queue lengths by up to 5 PCUs, again this increase as a result of the development traffic is not considered to be severe.
- 4.30 To summarise, the tables above demonstrate that the introduction of the development traffic at both junctions would not provide a significant impact on junction performance in terms of both RFC and average maximum queue lengths. It is acknowledged that in some cases with the custom stream intercept adjustments applied to the model, that the Shepley junction operates beyond theoretical capacity. However, it is also shown that for both the Shepley and New Mill junctions the introduction of development traffic would not have a significant impact on the operation of the junction that would be noticeable from the current daily fluctuations in flows on the principal road network.

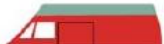
# Appendix A

## Traffic Surveys



|                                                                                    |                                                                                                            |                                                          |                             |                     |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-----------------------------|---------------------|
|  | <b>Site / Location:</b> Site 1 - A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Bamsley Road | <b>Project No:</b> 16082                                 | <b>Drawing No:</b> 16082-01 | <b>Drawn By:</b> DC |
|                                                                                    | <b>Survey Date:</b> Wednesday 6th November 2024                                                            | <b>Project Name:</b> Shepley                             |                             |                     |
|                                                                                    | <b>Survey Times:</b> 0700 – 0930 / 1600 – 1830                                                             | <b>Drawing Title:</b> Site Layout and Observed Movements |                             |                     |

# COBA VEHICLE CATEGORIES

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CAR                        |  SALOON<br>SALOON<br> ESTATE<br>ESTATE<br> PEOPLE CARRIER<br>PEOPLE CARRIER<br> CAR TOWING CARAVAN/TRAILER<br>CAR TOWING CARAVAN / TRAILER                                                                          |
| LIGHT GOODS VEHICLE (LGV)  |  VAN<br>VAN<br> <3.5 TONNES – single rear tyres<br><3.5 TONNES – single rear tyres<br> PICK-UP<br>PICK-UP                                                                                                                                                                                            |
| OTHER GOODS VEHICLE (OGV1) |  >3.5 TONNES<br>> 3.5 TONNES – twin rear tyres<br> 2 AXLES RIGID<br>2-AXLES RIGID<br> 2-AXLES RIGID<br>2-AXLES RIGID<br> 3 AXLES RIGID<br>3-AXLES-RIGID                                                             |
| OTHER GOODS VEHICLE (OGV2) |  4 OR MORE AXLES RIGID<br>4 OR MORE AXLES RIGID<br> 3 AXLES ARTIC<br>3-AXLES ARTIC<br> 4 OR MORE AXLES ARTIC<br>4 OR MORE AXLES ARTIC<br> OTHER GOODS VEHICLE WITH TRAILER<br>OTHER GOODS VEHICLE WITH TRAILER |
| BUSES & COACHES (PSV)      |  DOUBLE DECK BUS<br>DOUBLE DECK BUS<br> SINGLE DECK BUS OR COACH<br>SINGLE DECK BUS OR COACH                                                                                                                                                                                                                                                                                      |

# COBA VEHICLE CATEGORIES

## Definition of Categories

The various components of traffic have different characteristics in terms of operating costs, growth and occupancy. The most common categories into which the traffic is split in COBA; these are defined as:

## Cars (CARS)

Including taxis, estate cars, 'people carriers' and other passenger vehicles (for example, minibuses and camper vans) with a gross vehicle weight of less than 3.5 tonnes, normally ones which can accommodate not more than 15 seats. Three-wheeled cars, motor invalid carriages, Land Rovers, Range Rovers and Jeeps and smaller ambulances are included. Cars towing caravans or trailers are counted as one vehicle unless included as a separate class.

## Light Goods Vehicles (LGV)

Includes all goods vehicles up to 3.5 tonnes gross vehicle weight (goods vehicles over 3.5 tonnes have sideguards fitted between axles), including those towing a trailer or caravan. This includes all car delivery vans and those of the next larger carrying capacity such as transit vans. Included here are small pickup vans, three-wheeled goods vehicles, milk floats and pedestrian controlled motor vehicles. Most of this group is delivery vans of one type or another.

## Other Goods Vehicles (OGV 1)

Includes all rigid vehicles over 3.5 tonnes gross vehicle weight with two or three axles Includes larger ambulances, tractors (without trailers), road rollers for tarmac pressing, box vans and similar large vans. A two or three axle motor tractive unit without a trailer is also included.

## Other Goods Vehicles (OGV 2)

This category includes all rigid vehicles with four or more axles and all articulated vehicles. Also included in this class are OGV1 goods vehicles towing a caravan or trailer.

## Buses and Coaches (PSV)

Includes all public service vehicles and works buses with a gross vehicle weight of 3.5 tonnes or more, usually vehicles with more than 16 seats.



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | A to E |     |      |      |     |     |     | TOT | A to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 07:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 07:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 2      | 0   | 1    | 0    | 0   | 0   | 0   | 3   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 6      | 0   | 1    | 0    | 0   | 0   | 0   | 7   |
| 08:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 08:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 08:30 | 0      | 1   | 0    | 0    | 0   | 0   | 0   | 1   | 2      | 0   | 0    | 1    | 0   | 0   | 0   | 3   |
| 08:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| H/TOT | 0      | 1   | 0    | 0    | 0   | 0   | 0   | 1   | 7      | 0   | 0    | 1    | 0   | 0   | 0   | 8   |
| 09:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| 09:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   |
| P/TOT | 0      | 1   | 0    | 0    | 0   | 0   | 0   | 1   | 17     | 0   | 1    | 1    | 0   | 0   | 0   | 19  |

| TIME  | A to E |     |      |      |     |     |     | TOT | A to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0      | 2   | 0    | 0    | 0   | 0   | 0   | 2   |
| 16:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   |
| 16:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 16:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 10     | 3   | 0    | 0    | 0   | 0   | 0   | 13  |
| 17:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   |
| 17:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 17:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 5      | 2   | 0    | 0    | 0   | 0   | 0   | 7   |
| 17:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 7      | 0   | 0    | 0    | 0   | 0   | 0   | 7   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 20     | 2   | 0    | 0    | 0   | 0   | 0   | 22  |
| 18:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 18:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| P/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 31     | 5   | 0    | 0    | 0   | 0   | 0   | 36  |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | A to C |     |      |      |     |     |     | TOT | A to B |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 0      | 1   | 0    | 0    | 0   | 0   | 0   | 1   |
| 07:15 | 1      | 1   | 0    | 0    | 0   | 0   | 0   | 2   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 07:30 | 3      | 1   | 1    | 0    | 0   | 0   | 0   | 5   | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   |
| 07:45 | 1      | 2   | 0    | 0    | 0   | 0   | 0   | 3   | 1      | 2   | 0    | 0    | 0   | 0   | 0   | 3   |
| H/TOT | 6      | 4   | 1    | 0    | 0   | 0   | 0   | 11  | 8      | 4   | 0    | 0    | 0   | 0   | 0   | 12  |
| 08:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   |
| 08:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 1    | 0    | 0   | 0   | 0   | 2   |
| 08:30 | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| 08:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| H/TOT | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 11     | 0   | 1    | 0    | 0   | 0   | 0   | 12  |
| 09:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 1   | 0    | 0    | 0   | 0   | 0   | 2   |
| 09:15 | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 0      | 1   | 0    | 0    | 0   | 0   | 0   | 1   |
| H/TOT | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 1      | 2   | 0    | 0    | 0   | 0   | 0   | 3   |
| P/TOT | 10     | 4   | 1    | 0    | 0   | 0   | 0   | 15  | 20     | 6   | 1    | 0    | 0   | 0   | 0   | 27  |

| TIME  | A to C |     |      |      |     |     |     | TOT | A to B |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 2      | 0   | 0    | 1    | 0   | 0   | 0   | 3   | 3      | 1   | 0    | 0    | 0   | 0   | 0   | 4   |
| 16:15 | 1      | 0   | 1    | 1    | 0   | 0   | 0   | 3   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 16:30 | 2      | 0   | 0    | 1    | 0   | 0   | 0   | 3   | 0      | 1   | 0    | 0    | 0   | 0   | 0   | 1   |
| 16:45 | 1      | 0   | 0    | 1    | 0   | 0   | 0   | 2   | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| H/TOT | 6      | 0   | 1    | 4    | 0   | 0   | 0   | 11  | 8      | 2   | 0    | 0    | 0   | 0   | 0   | 10  |
| 17:00 | 1      | 1   | 0    | 0    | 0   | 0   | 0   | 2   | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   |
| 17:15 | 4      | 2   | 0    | 0    | 0   | 0   | 0   | 6   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 17:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 17:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 6      | 0   | 0    | 0    | 0   | 0   | 0   | 6   |
| H/TOT | 5      | 3   | 0    | 0    | 0   | 0   | 0   | 8   | 15     | 0   | 0    | 0    | 0   | 0   | 0   | 15  |
| 18:00 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 6      | 1   | 0    | 0    | 0   | 0   | 0   | 7   |
| 18:15 | 1      | 1   | 0    | 0    | 0   | 0   | 0   | 2   | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   |
| H/TOT | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   | 10     | 1   | 0    | 0    | 0   | 0   | 0   | 11  |
| P/TOT | 15     | 4   | 1    | 4    | 0   | 0   | 0   | 24  | 33     | 3   | 0    | 0    | 0   | 0   | 0   | 36  |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | A to A |     |      |      |     |     |     | TOT | B to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 7      | 1   | 0    | 0    | 0   | 0   | 0   | 8   |
| 07:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 7      | 1   | 1    | 0    | 0   | 0   | 0   | 9   |
| 07:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 10     | 1   | 0    | 0    | 0   | 0   | 0   | 11  |
| 07:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 5      | 1   | 1    | 0    | 0   | 0   | 0   | 7   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 29     | 4   | 2    | 0    | 0   | 0   | 0   | 35  |
| 08:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 11     | 2   | 0    | 0    | 0   | 0   | 0   | 13  |
| 08:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 6      | 1   | 0    | 0    | 0   | 0   | 0   | 7   |
| 08:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 9      | 2   | 0    | 0    | 0   | 0   | 0   | 11  |
| 08:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 14     | 4   | 0    | 0    | 0   | 0   | 0   | 18  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 40     | 9   | 0    | 0    | 0   | 0   | 0   | 49  |
| 09:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 7      | 2   | 0    | 0    | 0   | 0   | 0   | 9   |
| 09:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 5      | 3   | 0    | 0    | 0   | 0   | 0   | 8   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 12     | 5   | 0    | 0    | 0   | 0   | 0   | 17  |
| P/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 81     | 18  | 2    | 0    | 0   | 0   | 0   | 101 |

| TIME  | A to A |     |      |      |     |     |     | TOT | B to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 6      | 2   | 1    | 0    | 0   | 0   | 0   | 9   |
| 16:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 8      | 2   | 1    | 0    | 0   | 0   | 0   | 11  |
| 16:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 9      | 0   | 0    | 0    | 0   | 0   | 0   | 9   |
| 16:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 5      | 1   | 0    | 1    | 0   | 0   | 0   | 7   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 28     | 5   | 2    | 1    | 0   | 0   | 0   | 36  |
| 17:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 11     | 2   | 0    | 0    | 0   | 0   | 0   | 13  |
| 17:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 10     | 2   | 1    | 0    | 0   | 0   | 0   | 13  |
| 17:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 14     | 0   | 0    | 0    | 0   | 0   | 0   | 14  |
| 17:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 11     | 1   | 0    | 0    | 0   | 0   | 0   | 12  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 46     | 5   | 1    | 0    | 0   | 0   | 0   | 52  |
| 18:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 8      | 1   | 1    | 0    | 0   | 0   | 0   | 10  |
| 18:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 8      | 0   | 0    | 0    | 0   | 0   | 0   | 8   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 16     | 1   | 1    | 0    | 0   | 0   | 0   | 18  |
| P/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 90     | 11  | 4    | 1    | 0   | 0   | 0   | 106 |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | B to E |     |      |      |     |     |     | TOT | B to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 48     | 7   | 0    | 0    | 0   | 0   | 0   | 55  | 29     | 4   | 1    | 2    | 0   | 0   | 0   | 36  |
| 07:15 | 59     | 10  | 0    | 1    | 0   | 0   | 1   | 71  | 24     | 9   | 2    | 0    | 0   | 0   | 0   | 35  |
| 07:30 | 57     | 6   | 0    | 0    | 3   | 0   | 1   | 67  | 39     | 6   | 2    | 0    | 1   | 1   | 0   | 49  |
| 07:45 | 66     | 10  | 1    | 0    | 1   | 0   | 0   | 78  | 46     | 7   | 2    | 0    | 0   | 0   | 0   | 55  |
| H/TOT | 230    | 33  | 1    | 1    | 4   | 0   | 2   | 271 | 138    | 26  | 7    | 2    | 1   | 1   | 0   | 175 |
| 08:00 | 68     | 5   | 1    | 0    | 3   | 0   | 0   | 77  | 50     | 15  | 3    | 1    | 0   | 0   | 0   | 69  |
| 08:15 | 55     | 8   | 3    | 0    | 0   | 0   | 0   | 66  | 36     | 10  | 0    | 2    | 0   | 0   | 0   | 48  |
| 08:30 | 34     | 4   | 2    | 0    | 0   | 0   | 0   | 40  | 34     | 4   | 2    | 2    | 0   | 0   | 0   | 42  |
| 08:45 | 31     | 1   | 0    | 0    | 0   | 0   | 0   | 32  | 28     | 3   | 1    | 1    | 0   | 0   | 0   | 33  |
| H/TOT | 188    | 18  | 6    | 0    | 3   | 0   | 0   | 215 | 148    | 32  | 6    | 6    | 0   | 0   | 0   | 192 |
| 09:00 | 32     | 5   | 1    | 0    | 0   | 0   | 0   | 38  | 25     | 4   | 2    | 0    | 0   | 0   | 0   | 31  |
| 09:15 | 26     | 3   | 2    | 1    | 0   | 0   | 0   | 32  | 32     | 5   | 2    | 0    | 0   | 0   | 0   | 39  |
| H/TOT | 58     | 8   | 3    | 1    | 0   | 0   | 0   | 70  | 57     | 9   | 4    | 0    | 0   | 0   | 0   | 70  |
| P/TOT | 476    | 59  | 10   | 2    | 7   | 0   | 2   | 556 | 343    | 67  | 17   | 8    | 1   | 1   | 0   | 437 |

| TIME  | B to E |     |      |      |     |     |     | TOT | B to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 30     | 6   | 0    | 0    | 1   | 2   | 0   | 39  | 31     | 9   | 2    | 2    | 0   | 0   | 0   | 44  |
| 16:15 | 35     | 13  | 2    | 0    | 0   | 0   | 0   | 50  | 60     | 9   | 1    | 4    | 0   | 0   | 0   | 74  |
| 16:30 | 34     | 1   | 0    | 0    | 1   | 0   | 0   | 36  | 49     | 8   | 0    | 1    | 0   | 0   | 0   | 58  |
| 16:45 | 25     | 2   | 0    | 0    | 0   | 0   | 0   | 27  | 54     | 5   | 0    | 1    | 0   | 1   | 0   | 61  |
| H/TOT | 124    | 22  | 2    | 0    | 2   | 2   | 0   | 152 | 194    | 31  | 3    | 8    | 0   | 1   | 0   | 237 |
| 17:00 | 33     | 1   | 0    | 0    | 1   | 0   | 0   | 35  | 68     | 3   | 2    | 2    | 0   | 0   | 0   | 75  |
| 17:15 | 34     | 3   | 1    | 0    | 0   | 0   | 0   | 38  | 84     | 2   | 0    | 1    | 0   | 0   | 0   | 87  |
| 17:30 | 37     | 0   | 2    | 0    | 0   | 0   | 0   | 39  | 70     | 3   | 0    | 0    | 0   | 0   | 0   | 73  |
| 17:45 | 18     | 2   | 1    | 0    | 0   | 0   | 0   | 21  | 53     | 2   | 0    | 1    | 0   | 0   | 0   | 56  |
| H/TOT | 122    | 6   | 4    | 0    | 1   | 0   | 0   | 133 | 275    | 10  | 2    | 4    | 0   | 0   | 0   | 291 |
| 18:00 | 23     | 2   | 1    | 0    | 1   | 0   | 0   | 27  | 35     | 1   | 0    | 1    | 0   | 0   | 0   | 37  |
| 18:15 | 20     | 0   | 0    | 0    | 0   | 0   | 0   | 20  | 33     | 1   | 0    | 1    | 0   | 1   | 0   | 36  |
| H/TOT | 43     | 2   | 1    | 0    | 1   | 0   | 0   | 47  | 68     | 2   | 0    | 2    | 0   | 1   | 0   | 73  |
| P/TOT | 289    | 30  | 7    | 0    | 4   | 2   | 0   | 332 | 537    | 43  | 5    | 14   | 0   | 2   | 0   | 601 |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | B to C |     |      |      |     |     |     | TOT | B to B |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:15 | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:30 | 11     | 2   | 1    | 2    | 0   | 0   | 0   | 16  | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 07:45 | 12     | 2   | 2    | 0    | 0   | 0   | 0   | 16  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 31     | 4   | 3    | 2    | 0   | 0   | 0   | 40  | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 08:00 | 8      | 1   | 0    | 0    | 0   | 0   | 0   | 9   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:15 | 6      | 1   | 0    | 0    | 0   | 0   | 0   | 7   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:30 | 9      | 0   | 0    | 0    | 0   | 0   | 0   | 9   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:45 | 10     | 1   | 0    | 0    | 0   | 0   | 0   | 11  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 33     | 3   | 0    | 0    | 0   | 0   | 0   | 36  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 09:00 | 6      | 0   | 0    | 0    | 0   | 0   | 0   | 6   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 09:15 | 2      | 1   | 0    | 0    | 0   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 8      | 1   | 0    | 0    | 0   | 0   | 0   | 9   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| P/TOT | 72     | 8   | 3    | 2    | 0   | 0   | 0   | 85  | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |

| TIME  | B to C |     |      |      |     |     |     | TOT | B to B |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 8      | 2   | 0    | 1    | 0   | 0   | 0   | 11  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:15 | 7      | 1   | 0    | 2    | 0   | 0   | 0   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:30 | 12     | 0   | 1    | 0    | 0   | 0   | 0   | 13  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:45 | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 32     | 3   | 1    | 3    | 0   | 0   | 0   | 39  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:00 | 19     | 0   | 0    | 0    | 0   | 0   | 0   | 19  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:15 | 7      | 0   | 0    | 0    | 0   | 0   | 0   | 7   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:30 | 6      | 0   | 0    | 2    | 0   | 0   | 0   | 8   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:45 | 9      | 0   | 0    | 0    | 0   | 0   | 1   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 41     | 0   | 0    | 2    | 0   | 0   | 1   | 44  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 18:00 | 8      | 1   | 0    | 0    | 0   | 0   | 1   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 18:15 | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 13     | 1   | 0    | 0    | 0   | 0   | 1   | 15  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| P/TOT | 86     | 4   | 1    | 5    | 0   | 0   | 2   | 98  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | C to B |     |      |      |     |     |     | TOT | C to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 9      | 1   | 1    | 0    | 0   | 0   | 0   | 11  |
| 07:15 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 6      | 3   | 0    | 0    | 0   | 0   | 0   | 9   |
| 07:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| 07:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 1   | 0    | 0    | 0   | 0   | 0   | 4   |
| H/TOT | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 20     | 5   | 1    | 0    | 0   | 0   | 0   | 26  |
| 08:00 | 0      | 0   | 0    | 2    | 0   | 0   | 0   | 2   | 3      | 2   | 0    | 0    | 0   | 0   | 0   | 5   |
| 08:15 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   |
| 08:30 | 1      | 1   | 2    | 1    | 1   | 0   | 0   | 6   | 6      | 1   | 1    | 0    | 0   | 0   | 0   | 8   |
| 08:45 | 3      | 1   | 0    | 0    | 0   | 0   | 0   | 4   | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   |
| H/TOT | 5      | 2   | 2    | 3    | 1   | 0   | 0   | 13  | 17     | 3   | 1    | 0    | 0   | 0   | 0   | 21  |
| 09:00 | 1      | 0   | 0    | 1    | 0   | 0   | 0   | 2   | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   |
| 09:15 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 3      | 2   | 0    | 0    | 0   | 0   | 0   | 5   |
| H/TOT | 2      | 0   | 0    | 1    | 0   | 0   | 0   | 3   | 7      | 2   | 0    | 0    | 0   | 0   | 0   | 9   |
| P/TOT | 9      | 2   | 2    | 4    | 1   | 0   | 0   | 18  | 44     | 10  | 2    | 0    | 0   | 0   | 0   | 56  |

| TIME  | C to B |     |      |      |     |     |     | TOT | C to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 5      | 0   | 0    | 0    | 1   | 0   | 0   | 6   | 3      | 3   | 0    | 0    | 0   | 0   | 0   | 6   |
| 16:15 | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   | 4      | 2   | 0    | 0    | 0   | 0   | 0   | 6   |
| 16:30 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   |
| 16:45 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| H/TOT | 13     | 0   | 0    | 0    | 1   | 0   | 0   | 14  | 13     | 6   | 0    | 0    | 0   | 0   | 0   | 19  |
| 17:00 | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 4      | 2   | 0    | 0    | 0   | 0   | 0   | 6   |
| 17:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   |
| 17:30 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 4      | 0   | 1    | 0    | 0   | 0   | 0   | 5   |
| 17:45 | 1      | 1   | 0    | 0    | 0   | 0   | 0   | 2   | 3      | 1   | 0    | 0    | 0   | 0   | 0   | 4   |
| H/TOT | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   | 15     | 4   | 1    | 0    | 0   | 0   | 0   | 20  |
| 18:00 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 2      | 1   | 0    | 0    | 0   | 0   | 0   | 3   |
| 18:15 | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   | 8      | 1   | 0    | 0    | 0   | 0   | 0   | 9   |
| H/TOT | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   | 10     | 2   | 0    | 0    | 0   | 0   | 0   | 12  |
| P/TOT | 22     | 1   | 0    | 0    | 1   | 0   | 0   | 24  | 38     | 12  | 1    | 0    | 0   | 0   | 0   | 51  |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | C to E |     |      |      |     |     |     | TOT | C to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 39     | 5   | 0    | 0    | 0   | 0   | 0   | 44  | 16     | 2   | 1    | 0    | 1   | 0   | 0   | 20  |
| 07:15 | 38     | 7   | 3    | 1    | 0   | 1   | 0   | 50  | 17     | 5   | 1    | 0    | 1   | 0   | 0   | 24  |
| 07:30 | 35     | 10  | 2    | 1    | 0   | 0   | 0   | 48  | 15     | 5   | 1    | 0    | 0   | 0   | 0   | 21  |
| 07:45 | 35     | 6   | 0    | 0    | 1   | 0   | 0   | 42  | 12     | 5   | 1    | 1    | 0   | 0   | 0   | 19  |
| H/TOT | 147    | 28  | 5    | 2    | 1   | 1   | 0   | 184 | 60     | 17  | 4    | 1    | 2   | 0   | 0   | 84  |
| 08:00 | 47     | 5   | 1    | 0    | 2   | 0   | 0   | 55  | 11     | 5   | 2    | 0    | 0   | 0   | 0   | 18  |
| 08:15 | 29     | 6   | 0    | 3    | 0   | 0   | 0   | 38  | 15     | 7   | 2    | 1    | 0   | 0   | 0   | 25  |
| 08:30 | 33     | 6   | 1    | 1    | 0   | 0   | 0   | 41  | 13     | 5   | 0    | 0    | 0   | 0   | 0   | 18  |
| 08:45 | 41     | 5   | 2    | 1    | 0   | 0   | 0   | 49  | 18     | 3   | 0    | 1    | 0   | 0   | 0   | 22  |
| H/TOT | 150    | 22  | 4    | 5    | 2   | 0   | 0   | 183 | 57     | 20  | 4    | 2    | 0   | 0   | 0   | 83  |
| 09:00 | 40     | 11  | 0    | 0    | 0   | 0   | 0   | 51  | 10     | 3   | 1    | 0    | 0   | 0   | 0   | 14  |
| 09:15 | 33     | 2   | 1    | 0    | 0   | 0   | 0   | 36  | 11     | 3   | 0    | 1    | 1   | 0   | 0   | 16  |
| H/TOT | 73     | 13  | 1    | 0    | 0   | 0   | 0   | 87  | 21     | 6   | 1    | 1    | 1   | 0   | 0   | 30  |
| P/TOT | 370    | 63  | 10   | 7    | 3   | 1   | 0   | 454 | 138    | 43  | 9    | 4    | 3   | 0   | 0   | 197 |

| TIME  | C to E |     |      |      |     |     |     | TOT | C to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 24     | 7   | 2    | 1    | 0   | 0   | 0   | 34  | 10     | 1   | 0    | 0    | 0   | 0   | 0   | 11  |
| 16:15 | 31     | 3   | 0    | 0    | 0   | 1   | 0   | 35  | 20     | 3   | 0    | 0    | 0   | 0   | 0   | 23  |
| 16:30 | 28     | 5   | 1    | 0    | 0   | 0   | 0   | 34  | 10     | 1   | 0    | 2    | 0   | 0   | 0   | 13  |
| 16:45 | 27     | 10  | 0    | 0    | 0   | 0   | 0   | 37  | 18     | 3   | 0    | 0    | 0   | 0   | 0   | 21  |
| H/TOT | 110    | 25  | 3    | 1    | 0   | 1   | 0   | 140 | 58     | 8   | 0    | 2    | 0   | 0   | 0   | 68  |
| 17:00 | 18     | 6   | 1    | 0    | 1   | 0   | 0   | 26  | 9      | 5   | 0    | 0    | 0   | 0   | 0   | 14  |
| 17:15 | 35     | 1   | 0    | 0    | 1   | 0   | 0   | 37  | 13     | 3   | 0    | 0    | 0   | 0   | 0   | 16  |
| 17:30 | 35     | 4   | 0    | 0    | 0   | 0   | 0   | 39  | 20     | 4   | 0    | 0    | 0   | 0   | 0   | 24  |
| 17:45 | 36     | 3   | 0    | 0    | 0   | 0   | 0   | 39  | 16     | 2   | 0    | 0    | 0   | 0   | 0   | 18  |
| H/TOT | 124    | 14  | 1    | 0    | 2   | 0   | 0   | 141 | 58     | 14  | 0    | 0    | 0   | 0   | 0   | 72  |
| 18:00 | 27     | 1   | 0    | 0    | 1   | 0   | 0   | 29  | 14     | 3   | 0    | 0    | 1   | 0   | 0   | 18  |
| 18:15 | 33     | 1   | 0    | 0    | 0   | 0   | 0   | 34  | 16     | 3   | 1    | 0    | 0   | 0   | 0   | 20  |
| H/TOT | 60     | 2   | 0    | 0    | 1   | 0   | 0   | 63  | 30     | 6   | 1    | 0    | 1   | 0   | 0   | 38  |
| P/TOT | 294    | 41  | 4    | 1    | 3   | 1   | 0   | 344 | 146    | 28  | 1    | 2    | 1   | 0   | 0   | 178 |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | C to C |     |      |      |     |     |     | TOT | D to C |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 23     | 8   | 1    | 1    | 0   | 0   | 0   | 33  |
| 07:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 26     | 11  | 2    | 0    | 0   | 0   | 0   | 39  |
| 07:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 31     | 6   | 1    | 2    | 0   | 0   | 0   | 40  |
| 07:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 45     | 9   | 1    | 0    | 0   | 0   | 0   | 55  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 125    | 34  | 5    | 3    | 0   | 0   | 0   | 167 |
| 08:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 35     | 10  | 0    | 1    | 0   | 0   | 0   | 46  |
| 08:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 43     | 5   | 0    | 1    | 0   | 0   | 0   | 49  |
| 08:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 19     | 7   | 0    | 2    | 0   | 0   | 0   | 28  |
| 08:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 24     | 9   | 2    | 1    | 1   | 0   | 1   | 38  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 121    | 31  | 2    | 5    | 1   | 0   | 1   | 161 |
| 09:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 22     | 6   | 1    | 1    | 0   | 0   | 0   | 30  |
| 09:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 31     | 6   | 0    | 1    | 0   | 0   | 0   | 38  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 53     | 12  | 1    | 2    | 0   | 0   | 0   | 68  |
| P/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 299    | 77  | 8    | 10   | 1   | 0   | 1   | 396 |

| TIME  | C to C |     |      |      |     |     |     | TOT | D to C |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 50     | 10  | 1    | 0    | 0   | 1   | 0   | 62  |
| 16:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 62     | 11  | 1    | 0    | 0   | 0   | 0   | 74  |
| 16:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 72     | 7   | 0    | 0    | 1   | 0   | 0   | 80  |
| 16:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 85     | 8   | 1    | 0    | 2   | 0   | 0   | 96  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 269    | 36  | 3    | 0    | 3   | 1   | 0   | 312 |
| 17:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 62     | 10  | 1    | 0    | 0   | 0   | 0   | 73  |
| 17:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 57     | 12  | 1    | 0    | 1   | 1   | 0   | 72  |
| 17:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 64     | 4   | 1    | 0    | 0   | 0   | 1   | 70  |
| 17:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 49     | 4   | 0    | 0    | 0   | 0   | 0   | 53  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 232    | 30  | 3    | 0    | 1   | 1   | 1   | 268 |
| 18:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 42     | 1   | 0    | 1    | 0   | 1   | 0   | 45  |
| 18:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 38     | 4   | 0    | 0    | 1   | 0   | 0   | 43  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 80     | 5   | 0    | 1    | 1   | 1   | 0   | 88  |
| P/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 581    | 71  | 6    | 1    | 5   | 3   | 1   | 668 |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | D to B |     |      |      |     |     |     | TOT | D to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 46     | 2   | 1    | 0    | 0   | 0   | 0   | 49  | 1      | 0   | 1    | 0    | 0   | 0   | 0   | 2   |
| 07:15 | 59     | 5   | 4    | 1    | 0   | 0   | 0   | 69  | 2      | 0   | 1    | 0    | 0   | 0   | 0   | 3   |
| 07:30 | 69     | 6   | 2    | 2    | 0   | 0   | 0   | 79  | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 07:45 | 70     | 7   | 1    | 0    | 0   | 0   | 0   | 78  | 2      | 1   | 0    | 0    | 0   | 0   | 0   | 3   |
| H/TOT | 244    | 20  | 8    | 3    | 0   | 0   | 0   | 275 | 6      | 1   | 2    | 0    | 0   | 0   | 0   | 9   |
| 08:00 | 51     | 9   | 3    | 0    | 0   | 0   | 0   | 63  | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 08:15 | 65     | 9   | 1    | 0    | 0   | 0   | 0   | 75  | 4      | 0   | 1    | 0    | 0   | 0   | 0   | 5   |
| 08:30 | 34     | 7   | 3    | 2    | 0   | 0   | 0   | 46  | 7      | 0   | 0    | 0    | 0   | 0   | 0   | 7   |
| 08:45 | 54     | 4   | 2    | 1    | 0   | 0   | 0   | 61  | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| H/TOT | 204    | 29  | 9    | 3    | 0   | 0   | 0   | 245 | 16     | 0   | 1    | 0    | 0   | 0   | 0   | 17  |
| 09:00 | 39     | 6   | 4    | 1    | 0   | 0   | 0   | 50  | 5      | 2   | 0    | 0    | 0   | 0   | 0   | 7   |
| 09:15 | 33     | 3   | 1    | 2    | 0   | 0   | 0   | 39  | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| H/TOT | 72     | 9   | 5    | 3    | 0   | 0   | 0   | 89  | 7      | 2   | 0    | 0    | 0   | 0   | 0   | 9   |
| P/TOT | 520    | 58  | 22   | 9    | 0   | 0   | 0   | 609 | 29     | 3   | 3    | 0    | 0   | 0   | 0   | 35  |

| TIME  | D to B |     |      |      |     |     |     | TOT | D to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 45     | 6   | 3    | 0    | 0   | 0   | 0   | 54  | 8      | 0   | 0    | 0    | 0   | 0   | 0   | 8   |
| 16:15 | 37     | 4   | 1    | 2    | 0   | 0   | 0   | 44  | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| 16:30 | 40     | 7   | 0    | 1    | 0   | 0   | 0   | 48  | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 16:45 | 56     | 3   | 1    | 0    | 0   | 0   | 0   | 60  | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| H/TOT | 178    | 20  | 5    | 3    | 0   | 0   | 0   | 206 | 15     | 0   | 0    | 0    | 0   | 0   | 0   | 15  |
| 17:00 | 49     | 3   | 1    | 1    | 1   | 0   | 0   | 55  | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 17:15 | 53     | 9   | 0    | 0    | 0   | 0   | 0   | 62  | 3      | 1   | 0    | 0    | 0   | 0   | 0   | 4   |
| 17:30 | 48     | 2   | 0    | 1    | 0   | 0   | 2   | 53  | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   |
| 17:45 | 49     | 3   | 1    | 1    | 0   | 0   | 0   | 54  | 6      | 0   | 0    | 0    | 0   | 0   | 0   | 6   |
| H/TOT | 199    | 17  | 2    | 3    | 1   | 0   | 2   | 224 | 14     | 1   | 0    | 0    | 0   | 0   | 0   | 15  |
| 18:00 | 37     | 1   | 0    | 0    | 0   | 0   | 0   | 38  | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| 18:15 | 30     | 3   | 0    | 0    | 0   | 0   | 0   | 33  | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   |
| H/TOT | 67     | 4   | 0    | 0    | 0   | 0   | 0   | 71  | 6      | 1   | 0    | 0    | 0   | 0   | 0   | 7   |
| P/TOT | 444    | 41  | 7    | 6    | 1   | 0   | 2   | 501 | 35     | 2   | 0    | 0    | 0   | 0   | 0   | 37  |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | D to E |     |      |      |     |     |     | TOT | D to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 1      | 1   | 0    | 1    | 0   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:15 | 5      | 1   | 0    | 0    | 0   | 0   | 0   | 6   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:30 | 3      | 0   | 2    | 2    | 0   | 0   | 0   | 7   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:45 | 6      | 3   | 1    | 0    | 0   | 0   | 0   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 15     | 5   | 3    | 3    | 0   | 0   | 0   | 26  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:00 | 2      | 6   | 0    | 0    | 0   | 0   | 0   | 8   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:15 | 4      | 2   | 1    | 1    | 0   | 0   | 0   | 8   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:30 | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:45 | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 15     | 9   | 1    | 1    | 0   | 0   | 0   | 26  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 09:00 | 1      | 0   | 0    | 1    | 0   | 0   | 0   | 2   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 09:15 | 0      | 0   | 1    | 1    | 0   | 0   | 0   | 2   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 1      | 0   | 1    | 2    | 0   | 0   | 0   | 4   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| P/TOT | 31     | 14  | 5    | 6    | 0   | 0   | 0   | 56  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |

| TIME  | D to E |     |      |      |     |     |     | TOT | D to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 6      | 1   | 0    | 0    | 0   | 0   | 0   | 7   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:15 | 2      | 0   | 0    | 0    | 1   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:30 | 4      | 2   | 0    | 0    | 0   | 0   | 0   | 6   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:45 | 6      | 0   | 0    | 0    | 0   | 0   | 0   | 6   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 18     | 3   | 0    | 0    | 1   | 0   | 0   | 22  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:00 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:15 | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:30 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:45 | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 14     | 1   | 0    | 0    | 0   | 0   | 0   | 15  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 18:00 | 6      | 0   | 0    | 0    | 0   | 0   | 0   | 6   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 18:15 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 9      | 0   | 0    | 0    | 0   | 0   | 0   | 9   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| P/TOT | 41     | 4   | 0    | 0    | 1   | 0   | 0   | 46  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | E to D |     |      |      |     |     |     | TOT | E to C |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 3      | 2   | 2    | 0    | 0   | 0   | 0   | 7   | 26     | 4   | 2    | 0    | 0   | 1   | 0   | 33  |
| 07:15 | 5      | 1   | 1    | 0    | 0   | 0   | 0   | 7   | 21     | 9   | 1    | 1    | 1   | 0   | 0   | 33  |
| 07:30 | 5      | 1   | 1    | 0    | 0   | 0   | 0   | 7   | 27     | 10  | 1    | 0    | 0   | 0   | 0   | 38  |
| 07:45 | 1      | 1   | 0    | 0    | 0   | 0   | 0   | 2   | 25     | 11  | 3    | 0    | 0   | 0   | 1   | 40  |
| H/TOT | 14     | 5   | 4    | 0    | 0   | 0   | 0   | 23  | 99     | 34  | 7    | 1    | 1   | 1   | 1   | 144 |
| 08:00 | 3      | 2   | 1    | 1    | 0   | 0   | 0   | 7   | 17     | 10  | 2    | 0    | 0   | 0   | 0   | 29  |
| 08:15 | 5      | 1   | 0    | 0    | 0   | 0   | 0   | 6   | 20     | 9   | 1    | 1    | 0   | 0   | 0   | 31  |
| 08:30 | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   | 25     | 6   | 0    | 1    | 0   | 0   | 0   | 32  |
| 08:45 | 1      | 2   | 0    | 0    | 0   | 0   | 0   | 3   | 24     | 7   | 3    | 0    | 0   | 0   | 0   | 34  |
| H/TOT | 13     | 6   | 1    | 1    | 0   | 0   | 0   | 21  | 86     | 32  | 6    | 2    | 0   | 0   | 0   | 126 |
| 09:00 | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   | 21     | 13  | 6    | 0    | 0   | 0   | 0   | 40  |
| 09:15 | 8      | 1   | 2    | 0    | 0   | 0   | 0   | 11  | 28     | 7   | 1    | 0    | 0   | 0   | 0   | 36  |
| H/TOT | 13     | 1   | 2    | 0    | 0   | 0   | 0   | 16  | 49     | 20  | 7    | 0    | 0   | 0   | 0   | 76  |
| P/TOT | 40     | 12  | 7    | 1    | 0   | 0   | 0   | 60  | 234    | 86  | 20   | 3    | 1   | 1   | 1   | 346 |

| TIME  | E to D |     |      |      |     |     |     | TOT | E to C |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 4      | 0   | 2    | 0    | 0   | 0   | 0   | 6   | 27     | 4   | 1    | 2    | 0   | 0   | 0   | 34  |
| 16:15 | 3      | 1   | 0    | 0    | 0   | 0   | 0   | 4   | 32     | 4   | 1    | 0    | 1   | 0   | 0   | 38  |
| 16:30 | 2      | 1   | 0    | 0    | 0   | 0   | 0   | 3   | 48     | 3   | 0    | 1    | 0   | 0   | 0   | 52  |
| 16:45 | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 22     | 2   | 0    | 0    | 0   | 1   | 0   | 25  |
| H/TOT | 11     | 2   | 2    | 0    | 0   | 0   | 0   | 15  | 129    | 13  | 2    | 3    | 1   | 1   | 0   | 149 |
| 17:00 | 1      | 3   | 1    | 0    | 0   | 0   | 0   | 5   | 42     | 0   | 1    | 1    | 0   | 0   | 0   | 44  |
| 17:15 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 38     | 4   | 0    | 0    | 0   | 0   | 0   | 42  |
| 17:30 | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   | 39     | 5   | 0    | 0    | 0   | 0   | 1   | 45  |
| 17:45 | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 34     | 4   | 0    | 0    | 0   | 0   | 0   | 38  |
| H/TOT | 10     | 3   | 1    | 0    | 0   | 0   | 0   | 14  | 153    | 13  | 1    | 1    | 0   | 0   | 1   | 169 |
| 18:00 | 4      | 1   | 2    | 0    | 0   | 0   | 2   | 9   | 33     | 0   | 0    | 0    | 1   | 1   | 0   | 35  |
| 18:15 | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 39     | 3   | 2    | 0    | 0   | 0   | 0   | 44  |
| H/TOT | 6      | 1   | 2    | 0    | 0   | 0   | 2   | 11  | 72     | 3   | 2    | 0    | 1   | 1   | 0   | 79  |
| P/TOT | 27     | 6   | 5    | 0    | 0   | 0   | 2   | 40  | 354    | 29  | 5    | 4    | 2   | 2   | 1   | 397 |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | E to B |     |      |      |     |     |     | TOT | E to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 5      | 2   | 0    | 1    | 0   | 0   | 0   | 8   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:15 | 5      | 1   | 0    | 0    | 1   | 0   | 0   | 7   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:30 | 11     | 5   | 0    | 1    | 0   | 0   | 0   | 17  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:45 | 6      | 4   | 1    | 0    | 0   | 0   | 0   | 11  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 27     | 12  | 1    | 2    | 1   | 0   | 0   | 43  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:00 | 9      | 2   | 0    | 2    | 0   | 0   | 0   | 13  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:15 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:30 | 10     | 5   | 1    | 2    | 0   | 0   | 0   | 18  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:45 | 10     | 3   | 0    | 2    | 1   | 0   | 0   | 16  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 32     | 10  | 1    | 6    | 1   | 0   | 0   | 50  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 09:00 | 14     | 3   | 2    | 0    | 0   | 0   | 0   | 19  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 09:15 | 14     | 3   | 0    | 1    | 0   | 0   | 0   | 18  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 28     | 6   | 2    | 1    | 0   | 0   | 0   | 37  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| P/TOT | 87     | 28  | 4    | 9    | 2   | 0   | 0   | 130 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |

| TIME  | E to B |     |      |      |     |     |     | TOT | E to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 16     | 2   | 1    | 1    | 0   | 0   | 0   | 20  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:15 | 12     | 2   | 0    | 1    | 1   | 0   | 0   | 16  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:30 | 8      | 4   | 0    | 0    | 0   | 0   | 0   | 12  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:45 | 10     | 2   | 0    | 1    | 1   | 0   | 0   | 14  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 46     | 10  | 1    | 3    | 2   | 0   | 0   | 62  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:00 | 12     | 1   | 1    | 0    | 0   | 0   | 0   | 14  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:15 | 8      | 2   | 0    | 0    | 0   | 0   | 0   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:30 | 7      | 1   | 0    | 0    | 2   | 0   | 0   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:45 | 13     | 2   | 0    | 0    | 0   | 0   | 0   | 15  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 40     | 6   | 1    | 0    | 2   | 0   | 0   | 49  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 18:00 | 13     | 0   | 0    | 0    | 0   | 0   | 0   | 13  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 18:15 | 9      | 0   | 0    | 0    | 1   | 0   | 0   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 22     | 0   | 0    | 0    | 1   | 0   | 0   | 23  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| P/TOT | 108    | 16  | 2    | 3    | 5   | 0   | 0   | 134 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |

SITE: 1

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

| TIME         | JUNCTION TOTAL |            |            |           |           |          |          | TOT         |
|--------------|----------------|------------|------------|-----------|-----------|----------|----------|-------------|
|              | CAR            | LGV        | OGV1       | OGV2      | PSV       | MCL      | PCL      |             |
| 07:00        | 260            | 40         | 10         | 5         | 1         | 1        | 0        | 317         |
| 07:15        | 286            | 64         | 16         | 4         | 3         | 1        | 1        | 375         |
| 07:30        | 324            | 60         | 14         | 10        | 4         | 1        | 1        | 414         |
| 07:45        | 338            | 72         | 15         | 1         | 2         | 0        | 1        | 429         |
| <b>H/TOT</b> | <b>1208</b>    | <b>236</b> | <b>55</b>  | <b>20</b> | <b>10</b> | <b>3</b> | <b>3</b> | <b>1535</b> |
| 08:00        | 324            | 74         | 13         | 7         | 5         | 0        | 0        | 423         |
| 08:15        | 300            | 59         | 10         | 9         | 0         | 0        | 0        | 378         |
| 08:30        | 248            | 51         | 12         | 12        | 1         | 0        | 0        | 324         |
| 08:45        | 273            | 43         | 10         | 7         | 2         | 0        | 1        | 336         |
| <b>H/TOT</b> | <b>1145</b>    | <b>227</b> | <b>45</b>  | <b>35</b> | <b>8</b>  | <b>0</b> | <b>1</b> | <b>1461</b> |
| 09:00        | 235            | 56         | 17         | 4         | 0         | 0        | 0        | 312         |
| 09:15        | 233            | 40         | 10         | 7         | 1         | 0        | 0        | 291         |
| <b>H/TOT</b> | <b>468</b>     | <b>96</b>  | <b>27</b>  | <b>11</b> | <b>1</b>  | <b>0</b> | <b>0</b> | <b>603</b>  |
| <b>P/TOT</b> | <b>2821</b>    | <b>559</b> | <b>127</b> | <b>66</b> | <b>19</b> | <b>3</b> | <b>4</b> | <b>3599</b> |

| PEAK HOUR CALCULATION | TOT         |
|-----------------------|-------------|
| 07:00 to 08:00        | 1535        |
| 07:15 to 08:15        | 1641        |
| 07:30 to 08:30        | <b>1644</b> |
| 07:45 to 08:45        | 1554        |
| 08:00 to 09:00        | 1461        |
| 08:15 to 09:15        | 1350        |
| 08:30 to 09:30        | <b>1263</b> |
| <b>A.M. Peak</b>      | <b>1644</b> |

| TIME         | JUNCTION TOTAL |            |           |           |           |           |          | TOT         |
|--------------|----------------|------------|-----------|-----------|-----------|-----------|----------|-------------|
|              | CAR            | LGV        | OGV1      | OGV2      | PSV       | MCL       | PCL      |             |
| 16:00        | 278            | 56         | 13        | 8         | 2         | 3         | 0        | 360         |
| 16:15        | 327            | 56         | 8         | 10        | 3         | 1         | 0        | 405         |
| 16:30        | 331            | 41         | 2         | 6         | 2         | 0         | 0        | 382         |
| 16:45        | 326            | 36         | 2         | 4         | 3         | 2         | 0        | 373         |
| <b>H/TOT</b> | <b>1262</b>    | <b>189</b> | <b>25</b> | <b>28</b> | <b>10</b> | <b>6</b>  | <b>0</b> | <b>1520</b> |
| 17:00        | 345            | 37         | 8         | 4         | 3         | 0         | 0        | 397         |
| 17:15        | 363            | 42         | 3         | 1         | 2         | 1         | 0        | 412         |
| 17:30        | 362            | 25         | 4         | 3         | 2         | 0         | 4        | 400         |
| 17:45        | 317            | 26         | 2         | 2         | 0         | 0         | 1        | 348         |
| <b>H/TOT</b> | <b>1387</b>    | <b>130</b> | <b>17</b> | <b>10</b> | <b>7</b>  | <b>1</b>  | <b>5</b> | <b>1557</b> |
| 18:00        | 265            | 14         | 4         | 2         | 4         | 2         | 3        | 294         |
| 18:15        | 257            | 18         | 3         | 1         | 2         | 1         | 0        | 282         |
| <b>H/TOT</b> | <b>522</b>     | <b>32</b>  | <b>7</b>  | <b>3</b>  | <b>6</b>  | <b>3</b>  | <b>3</b> | <b>576</b>  |
| <b>P/TOT</b> | <b>3171</b>    | <b>351</b> | <b>49</b> | <b>41</b> | <b>23</b> | <b>10</b> | <b>8</b> | <b>3653</b> |

| PEAK HOUR CALCULATION | TOT         |
|-----------------------|-------------|
| 16:00 to 17:00        | 1520        |
| 16:15 to 17:15        | 1557        |
| 16:30 to 17:30        | 1564        |
| 16:45 to 17:45        | <b>1582</b> |
| 17:00 to 18:00        | 1557        |
| 17:15 to 18:15        | 1454        |
| 17:30 to 18:30        | <b>1324</b> |
| <b>P.M. Peak</b>      | <b>1582</b> |



|                                                                                    |                                                                                                            |                                                          |                             |                     |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|-----------------------------|---------------------|
|  | <b>Site / Location:</b> Site 1 - A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Bamsley Road | <b>Project No:</b> 16082                                 | <b>Drawing No:</b> 16082-01 | <b>Drawn By:</b> DC |
|                                                                                    | <b>Survey Date:</b> Wednesday 6th November 2024                                                            | <b>Project Name:</b> Shepley                             |                             |                     |
|                                                                                    | <b>Survey Times:</b> 0700 – 0930 / 1600 – 1830                                                             | <b>Drawing Title:</b> Site Layout and Observed Movements |                             |                     |

# COBA VEHICLE CATEGORIES

|                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CAR</b>                        | <div>  <p>SALOON<br/>SALOON</p>  <p>ESTATE<br/>ESTATE</p>  <p>PEOPLE CARRIER<br/>PEOPLE CARRIER</p>  <p>CAR TOWING CARAVAN/TRAILER<br/>CAR TOWING CARAVAN / TRAILER</p> </div>                                                                          |
| <b>LIGHT GOODS VEHICLE (LGV)</b>  | <div>  <p>VAN</p>  <p>&lt;3.5 TONNES – single rear tyres</p>  <p>PICK-UP</p> </div>                                                                                                                                                                                                                                                      |
| <b>OTHER GOODS VEHICLE (OGV1)</b> | <div>  <p>&gt;3.5 TONNES<br/>&gt; 3.5 TONNES – twin rear tyres</p>  <p>2 AXLES RIGID<br/>2-AXLES RIGID</p>  <p>2 AXLES RIGID<br/>2-AXLES RIGID</p>  <p>3 AXLES RIGID<br/>3-AXLES-RIGID</p> </div>                                                       |
| <b>OTHER GOODS VEHICLE (OGV2)</b> | <div>  <p>4 OR MORE AXLES RIGID<br/>4 OR MORE AXLES RIGID</p>  <p>3 AXLES ARTIC<br/>3-AXLES ARTIC</p>  <p>4 OR MORE AXLES ARTIC<br/>4 OR MORE AXLES ARTIC</p>  <p>OTHER GOODS VEHICLE WITH TRAILER<br/>OTHER GOODS VEHICLE WITH TRAILER</p> </div> |
| <b>BUSES &amp; COACHES (PSV)</b>  | <div>  <p>DOUBLE DECK BUS<br/>DOUBLE DECK BUS</p>  <p>SINGLE DECK BUS OR COACH<br/>SINGLE DECK BUS OR COACH</p> </div>                                                                                                                                                                                                                                                                                                |

# COBA VEHICLE CATEGORIES

## Definition of Categories

The various components of traffic have different characteristics in terms of operating costs, growth and occupancy. The most common categories into which the traffic is split in COBA; these are defined as:

## Cars (CARS)

Including taxis, estate cars, 'people carriers' and other passenger vehicles (for example, minibuses and camper vans) with a gross vehicle weight of less than 3.5 tonnes, normally ones which can accommodate not more than 15 seats. Three-wheeled cars, motor invalid carriages, Land Rovers, Range Rovers and Jeeps and smaller ambulances are included. Cars towing caravans or trailers are counted as one vehicle unless included as a separate class.

## Light Goods Vehicles (LGV)

Includes all goods vehicles up to 3.5 tonnes gross vehicle weight (goods vehicles over 3.5 tonnes have sideguards fitted between axles), including those towing a trailer or caravan. This includes all car delivery vans and those of the next larger carrying capacity such as transit vans. Included here are small pickup vans, three-wheeled goods vehicles, milk floats and pedestrian controlled motor vehicles. Most of this group is delivery vans of one type or another.

## Other Goods Vehicles (OGV 1)

Includes all rigid vehicles over 3.5 tonnes gross vehicle weight with two or three axles Includes larger ambulances, tractors (without trailers), road rollers for tarmac pressing, box vans and similar large vans. A two or three axle motor tractive unit without a trailer is also included.

## Other Goods Vehicles (OGV 2)

This category includes all rigid vehicles with four or more axles and all articulated vehicles. Also included in this class are OGV1 goods vehicles towing a caravan or trailer.

## Buses and Coaches (PSV)

Includes all public service vehicles and works buses with a gross vehicle weight of 3.5 tonnes or more, usually vehicles with more than 16 seats.



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | A to E |     |      |      |     |     |     | TOT | A to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 07:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 07:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 2      | 0   | 1    | 0    | 0   | 0   | 0   | 3   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 6      | 0   | 1    | 0    | 0   | 0   | 0   | 7   |
| 08:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 08:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 08:30 | 0      | 1   | 0    | 0    | 0   | 0   | 0   | 1   | 2      | 0   | 0    | 1    | 0   | 0   | 0   | 3   |
| 08:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| H/TOT | 0      | 1   | 0    | 0    | 0   | 0   | 0   | 1   | 7      | 0   | 0    | 1    | 0   | 0   | 0   | 8   |
| 09:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| 09:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   |
| P/TOT | 0      | 1   | 0    | 0    | 0   | 0   | 0   | 1   | 17     | 0   | 1    | 1    | 0   | 0   | 0   | 19  |

| TIME  | A to E |     |      |      |     |     |     | TOT | A to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0      | 2   | 0    | 0    | 0   | 0   | 0   | 2   |
| 16:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   |
| 16:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 16:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 10     | 3   | 0    | 0    | 0   | 0   | 0   | 13  |
| 17:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   |
| 17:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 17:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 5      | 2   | 0    | 0    | 0   | 0   | 0   | 7   |
| 17:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 7      | 0   | 0    | 0    | 0   | 0   | 0   | 7   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 20     | 2   | 0    | 0    | 0   | 0   | 0   | 22  |
| 18:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 18:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| P/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 31     | 5   | 0    | 0    | 0   | 0   | 0   | 36  |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | A to C |     |      |      |     |     |     | TOT | A to B |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 0      | 1   | 0    | 0    | 0   | 0   | 0   | 1   |
| 07:15 | 1      | 1   | 0    | 0    | 0   | 0   | 0   | 2   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 07:30 | 3      | 1   | 1    | 0    | 0   | 0   | 0   | 5   | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   |
| 07:45 | 1      | 2   | 0    | 0    | 0   | 0   | 0   | 3   | 1      | 2   | 0    | 0    | 0   | 0   | 0   | 3   |
| H/TOT | 6      | 4   | 1    | 0    | 0   | 0   | 0   | 11  | 8      | 4   | 0    | 0    | 0   | 0   | 0   | 12  |
| 08:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   |
| 08:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 1    | 0    | 0   | 0   | 0   | 2   |
| 08:30 | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| 08:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| H/TOT | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 11     | 0   | 1    | 0    | 0   | 0   | 0   | 12  |
| 09:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 1   | 0    | 0    | 0   | 0   | 0   | 2   |
| 09:15 | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 0      | 1   | 0    | 0    | 0   | 0   | 0   | 1   |
| H/TOT | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 1      | 2   | 0    | 0    | 0   | 0   | 0   | 3   |
| P/TOT | 10     | 4   | 1    | 0    | 0   | 0   | 0   | 15  | 20     | 6   | 1    | 0    | 0   | 0   | 0   | 27  |

| TIME  | A to C |     |      |      |     |     |     | TOT | A to B |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 2      | 0   | 0    | 1    | 0   | 0   | 0   | 3   | 3      | 1   | 0    | 0    | 0   | 0   | 0   | 4   |
| 16:15 | 1      | 0   | 1    | 1    | 0   | 0   | 0   | 3   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 16:30 | 2      | 0   | 0    | 1    | 0   | 0   | 0   | 3   | 0      | 1   | 0    | 0    | 0   | 0   | 0   | 1   |
| 16:45 | 1      | 0   | 0    | 1    | 0   | 0   | 0   | 2   | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| H/TOT | 6      | 0   | 1    | 4    | 0   | 0   | 0   | 11  | 8      | 2   | 0    | 0    | 0   | 0   | 0   | 10  |
| 17:00 | 1      | 1   | 0    | 0    | 0   | 0   | 0   | 2   | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   |
| 17:15 | 4      | 2   | 0    | 0    | 0   | 0   | 0   | 6   | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 17:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 17:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 6      | 0   | 0    | 0    | 0   | 0   | 0   | 6   |
| H/TOT | 5      | 3   | 0    | 0    | 0   | 0   | 0   | 8   | 15     | 0   | 0    | 0    | 0   | 0   | 0   | 15  |
| 18:00 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 6      | 1   | 0    | 0    | 0   | 0   | 0   | 7   |
| 18:15 | 1      | 1   | 0    | 0    | 0   | 0   | 0   | 2   | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   |
| H/TOT | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   | 10     | 1   | 0    | 0    | 0   | 0   | 0   | 11  |
| P/TOT | 15     | 4   | 1    | 4    | 0   | 0   | 0   | 24  | 33     | 3   | 0    | 0    | 0   | 0   | 0   | 36  |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | A to A |     |      |      |     |     |     | TOT | B to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 7      | 1   | 0    | 0    | 0   | 0   | 0   | 8   |
| 07:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 7      | 1   | 1    | 0    | 0   | 0   | 0   | 9   |
| 07:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 10     | 1   | 0    | 0    | 0   | 0   | 0   | 11  |
| 07:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 5      | 1   | 1    | 0    | 0   | 0   | 0   | 7   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 29     | 4   | 2    | 0    | 0   | 0   | 0   | 35  |
| 08:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 11     | 2   | 0    | 0    | 0   | 0   | 0   | 13  |
| 08:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 6      | 1   | 0    | 0    | 0   | 0   | 0   | 7   |
| 08:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 9      | 2   | 0    | 0    | 0   | 0   | 0   | 11  |
| 08:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 14     | 4   | 0    | 0    | 0   | 0   | 0   | 18  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 40     | 9   | 0    | 0    | 0   | 0   | 0   | 49  |
| 09:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 7      | 2   | 0    | 0    | 0   | 0   | 0   | 9   |
| 09:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 5      | 3   | 0    | 0    | 0   | 0   | 0   | 8   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 12     | 5   | 0    | 0    | 0   | 0   | 0   | 17  |
| P/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 81     | 18  | 2    | 0    | 0   | 0   | 0   | 101 |

| TIME  | A to A |     |      |      |     |     |     | TOT | B to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 6      | 2   | 1    | 0    | 0   | 0   | 0   | 9   |
| 16:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 8      | 2   | 1    | 0    | 0   | 0   | 0   | 11  |
| 16:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 9      | 0   | 0    | 0    | 0   | 0   | 0   | 9   |
| 16:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 5      | 1   | 0    | 1    | 0   | 0   | 0   | 7   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 28     | 5   | 2    | 1    | 0   | 0   | 0   | 36  |
| 17:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 11     | 2   | 0    | 0    | 0   | 0   | 0   | 13  |
| 17:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 10     | 2   | 1    | 0    | 0   | 0   | 0   | 13  |
| 17:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 14     | 0   | 0    | 0    | 0   | 0   | 0   | 14  |
| 17:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 11     | 1   | 0    | 0    | 0   | 0   | 0   | 12  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 46     | 5   | 1    | 0    | 0   | 0   | 0   | 52  |
| 18:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 8      | 1   | 1    | 0    | 0   | 0   | 0   | 10  |
| 18:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 8      | 0   | 0    | 0    | 0   | 0   | 0   | 8   |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 16     | 1   | 1    | 0    | 0   | 0   | 0   | 18  |
| P/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 90     | 11  | 4    | 1    | 0   | 0   | 0   | 106 |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | B to E |     |      |      |     |     |     | TOT | B to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 48     | 7   | 0    | 0    | 0   | 0   | 0   | 55  | 29     | 4   | 1    | 2    | 0   | 0   | 0   | 36  |
| 07:15 | 59     | 10  | 0    | 1    | 0   | 0   | 1   | 71  | 24     | 9   | 2    | 0    | 0   | 0   | 0   | 35  |
| 07:30 | 57     | 6   | 0    | 0    | 3   | 0   | 1   | 67  | 39     | 6   | 2    | 0    | 1   | 1   | 0   | 49  |
| 07:45 | 66     | 10  | 1    | 0    | 1   | 0   | 0   | 78  | 46     | 7   | 2    | 0    | 0   | 0   | 0   | 55  |
| H/TOT | 230    | 33  | 1    | 1    | 4   | 0   | 2   | 271 | 138    | 26  | 7    | 2    | 1   | 1   | 0   | 175 |
| 08:00 | 68     | 5   | 1    | 0    | 3   | 0   | 0   | 77  | 50     | 15  | 3    | 1    | 0   | 0   | 0   | 69  |
| 08:15 | 55     | 8   | 3    | 0    | 0   | 0   | 0   | 66  | 36     | 10  | 0    | 2    | 0   | 0   | 0   | 48  |
| 08:30 | 34     | 4   | 2    | 0    | 0   | 0   | 0   | 40  | 34     | 4   | 2    | 2    | 0   | 0   | 0   | 42  |
| 08:45 | 31     | 1   | 0    | 0    | 0   | 0   | 0   | 32  | 28     | 3   | 1    | 1    | 0   | 0   | 0   | 33  |
| H/TOT | 188    | 18  | 6    | 0    | 3   | 0   | 0   | 215 | 148    | 32  | 6    | 6    | 0   | 0   | 0   | 192 |
| 09:00 | 32     | 5   | 1    | 0    | 0   | 0   | 0   | 38  | 25     | 4   | 2    | 0    | 0   | 0   | 0   | 31  |
| 09:15 | 26     | 3   | 2    | 1    | 0   | 0   | 0   | 32  | 32     | 5   | 2    | 0    | 0   | 0   | 0   | 39  |
| H/TOT | 58     | 8   | 3    | 1    | 0   | 0   | 0   | 70  | 57     | 9   | 4    | 0    | 0   | 0   | 0   | 70  |
| P/TOT | 476    | 59  | 10   | 2    | 7   | 0   | 2   | 556 | 343    | 67  | 17   | 8    | 1   | 1   | 0   | 437 |

| TIME  | B to E |     |      |      |     |     |     | TOT | B to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 30     | 6   | 0    | 0    | 1   | 2   | 0   | 39  | 31     | 9   | 2    | 2    | 0   | 0   | 0   | 44  |
| 16:15 | 35     | 13  | 2    | 0    | 0   | 0   | 0   | 50  | 60     | 9   | 1    | 4    | 0   | 0   | 0   | 74  |
| 16:30 | 34     | 1   | 0    | 0    | 1   | 0   | 0   | 36  | 49     | 8   | 0    | 1    | 0   | 0   | 0   | 58  |
| 16:45 | 25     | 2   | 0    | 0    | 0   | 0   | 0   | 27  | 54     | 5   | 0    | 1    | 0   | 1   | 0   | 61  |
| H/TOT | 124    | 22  | 2    | 0    | 2   | 2   | 0   | 152 | 194    | 31  | 3    | 8    | 0   | 1   | 0   | 237 |
| 17:00 | 33     | 1   | 0    | 0    | 1   | 0   | 0   | 35  | 68     | 3   | 2    | 2    | 0   | 0   | 0   | 75  |
| 17:15 | 34     | 3   | 1    | 0    | 0   | 0   | 0   | 38  | 84     | 2   | 0    | 1    | 0   | 0   | 0   | 87  |
| 17:30 | 37     | 0   | 2    | 0    | 0   | 0   | 0   | 39  | 70     | 3   | 0    | 0    | 0   | 0   | 0   | 73  |
| 17:45 | 18     | 2   | 1    | 0    | 0   | 0   | 0   | 21  | 53     | 2   | 0    | 1    | 0   | 0   | 0   | 56  |
| H/TOT | 122    | 6   | 4    | 0    | 1   | 0   | 0   | 133 | 275    | 10  | 2    | 4    | 0   | 0   | 0   | 291 |
| 18:00 | 23     | 2   | 1    | 0    | 1   | 0   | 0   | 27  | 35     | 1   | 0    | 1    | 0   | 0   | 0   | 37  |
| 18:15 | 20     | 0   | 0    | 0    | 0   | 0   | 0   | 20  | 33     | 1   | 0    | 1    | 0   | 1   | 0   | 36  |
| H/TOT | 43     | 2   | 1    | 0    | 1   | 0   | 0   | 47  | 68     | 2   | 0    | 2    | 0   | 1   | 0   | 73  |
| P/TOT | 289    | 30  | 7    | 0    | 4   | 2   | 0   | 332 | 537    | 43  | 5    | 14   | 0   | 2   | 0   | 601 |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | B to C |     |      |      |     |     |     | TOT | B to B |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:15 | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:30 | 11     | 2   | 1    | 2    | 0   | 0   | 0   | 16  | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 07:45 | 12     | 2   | 2    | 0    | 0   | 0   | 0   | 16  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 31     | 4   | 3    | 2    | 0   | 0   | 0   | 40  | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 08:00 | 8      | 1   | 0    | 0    | 0   | 0   | 0   | 9   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:15 | 6      | 1   | 0    | 0    | 0   | 0   | 0   | 7   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:30 | 9      | 0   | 0    | 0    | 0   | 0   | 0   | 9   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:45 | 10     | 1   | 0    | 0    | 0   | 0   | 0   | 11  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 33     | 3   | 0    | 0    | 0   | 0   | 0   | 36  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 09:00 | 6      | 0   | 0    | 0    | 0   | 0   | 0   | 6   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 09:15 | 2      | 1   | 0    | 0    | 0   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 8      | 1   | 0    | 0    | 0   | 0   | 0   | 9   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| P/TOT | 72     | 8   | 3    | 2    | 0   | 0   | 0   | 85  | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |

| TIME  | B to C |     |      |      |     |     |     | TOT | B to B |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 8      | 2   | 0    | 1    | 0   | 0   | 0   | 11  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:15 | 7      | 1   | 0    | 2    | 0   | 0   | 0   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:30 | 12     | 0   | 1    | 0    | 0   | 0   | 0   | 13  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:45 | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 32     | 3   | 1    | 3    | 0   | 0   | 0   | 39  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:00 | 19     | 0   | 0    | 0    | 0   | 0   | 0   | 19  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:15 | 7      | 0   | 0    | 0    | 0   | 0   | 0   | 7   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:30 | 6      | 0   | 0    | 2    | 0   | 0   | 0   | 8   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:45 | 9      | 0   | 0    | 0    | 0   | 0   | 1   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 41     | 0   | 0    | 2    | 0   | 0   | 1   | 44  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 18:00 | 8      | 1   | 0    | 0    | 0   | 0   | 1   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 18:15 | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 13     | 1   | 0    | 0    | 0   | 0   | 1   | 15  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| P/TOT | 86     | 4   | 1    | 5    | 0   | 0   | 2   | 98  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | C to B |     |      |      |     |     |     | TOT | C to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 9      | 1   | 1    | 0    | 0   | 0   | 0   | 11  |
| 07:15 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 6      | 3   | 0    | 0    | 0   | 0   | 0   | 9   |
| 07:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| 07:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 3      | 1   | 0    | 0    | 0   | 0   | 0   | 4   |
| H/TOT | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 20     | 5   | 1    | 0    | 0   | 0   | 0   | 26  |
| 08:00 | 0      | 0   | 0    | 2    | 0   | 0   | 0   | 2   | 3      | 2   | 0    | 0    | 0   | 0   | 0   | 5   |
| 08:15 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   |
| 08:30 | 1      | 1   | 2    | 1    | 1   | 0   | 0   | 6   | 6      | 1   | 1    | 0    | 0   | 0   | 0   | 8   |
| 08:45 | 3      | 1   | 0    | 0    | 0   | 0   | 0   | 4   | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   |
| H/TOT | 5      | 2   | 2    | 3    | 1   | 0   | 0   | 13  | 17     | 3   | 1    | 0    | 0   | 0   | 0   | 21  |
| 09:00 | 1      | 0   | 0    | 1    | 0   | 0   | 0   | 2   | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   |
| 09:15 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 3      | 2   | 0    | 0    | 0   | 0   | 0   | 5   |
| H/TOT | 2      | 0   | 0    | 1    | 0   | 0   | 0   | 3   | 7      | 2   | 0    | 0    | 0   | 0   | 0   | 9   |
| P/TOT | 9      | 2   | 2    | 4    | 1   | 0   | 0   | 18  | 44     | 10  | 2    | 0    | 0   | 0   | 0   | 56  |

| TIME  | C to B |     |      |      |     |     |     | TOT | C to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 5      | 0   | 0    | 0    | 1   | 0   | 0   | 6   | 3      | 3   | 0    | 0    | 0   | 0   | 0   | 6   |
| 16:15 | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   | 4      | 2   | 0    | 0    | 0   | 0   | 0   | 6   |
| 16:30 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   |
| 16:45 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| H/TOT | 13     | 0   | 0    | 0    | 1   | 0   | 0   | 14  | 13     | 6   | 0    | 0    | 0   | 0   | 0   | 19  |
| 17:00 | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 4      | 2   | 0    | 0    | 0   | 0   | 0   | 6   |
| 17:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   |
| 17:30 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 4      | 0   | 1    | 0    | 0   | 0   | 0   | 5   |
| 17:45 | 1      | 1   | 0    | 0    | 0   | 0   | 0   | 2   | 3      | 1   | 0    | 0    | 0   | 0   | 0   | 4   |
| H/TOT | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   | 15     | 4   | 1    | 0    | 0   | 0   | 0   | 20  |
| 18:00 | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   | 2      | 1   | 0    | 0    | 0   | 0   | 0   | 3   |
| 18:15 | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   | 8      | 1   | 0    | 0    | 0   | 0   | 0   | 9   |
| H/TOT | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   | 10     | 2   | 0    | 0    | 0   | 0   | 0   | 12  |
| P/TOT | 22     | 1   | 0    | 0    | 1   | 0   | 0   | 24  | 38     | 12  | 1    | 0    | 0   | 0   | 0   | 51  |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | C to E |     |      |      |     |     |     | TOT | C to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 39     | 5   | 0    | 0    | 0   | 0   | 0   | 44  | 16     | 2   | 1    | 0    | 1   | 0   | 0   | 20  |
| 07:15 | 38     | 7   | 3    | 1    | 0   | 1   | 0   | 50  | 17     | 5   | 1    | 0    | 1   | 0   | 0   | 24  |
| 07:30 | 35     | 10  | 2    | 1    | 0   | 0   | 0   | 48  | 15     | 5   | 1    | 0    | 0   | 0   | 0   | 21  |
| 07:45 | 35     | 6   | 0    | 0    | 1   | 0   | 0   | 42  | 12     | 5   | 1    | 1    | 0   | 0   | 0   | 19  |
| H/TOT | 147    | 28  | 5    | 2    | 1   | 1   | 0   | 184 | 60     | 17  | 4    | 1    | 2   | 0   | 0   | 84  |
| 08:00 | 47     | 5   | 1    | 0    | 2   | 0   | 0   | 55  | 11     | 5   | 2    | 0    | 0   | 0   | 0   | 18  |
| 08:15 | 29     | 6   | 0    | 3    | 0   | 0   | 0   | 38  | 15     | 7   | 2    | 1    | 0   | 0   | 0   | 25  |
| 08:30 | 33     | 6   | 1    | 1    | 0   | 0   | 0   | 41  | 13     | 5   | 0    | 0    | 0   | 0   | 0   | 18  |
| 08:45 | 41     | 5   | 2    | 1    | 0   | 0   | 0   | 49  | 18     | 3   | 0    | 1    | 0   | 0   | 0   | 22  |
| H/TOT | 150    | 22  | 4    | 5    | 2   | 0   | 0   | 183 | 57     | 20  | 4    | 2    | 0   | 0   | 0   | 83  |
| 09:00 | 40     | 11  | 0    | 0    | 0   | 0   | 0   | 51  | 10     | 3   | 1    | 0    | 0   | 0   | 0   | 14  |
| 09:15 | 33     | 2   | 1    | 0    | 0   | 0   | 0   | 36  | 11     | 3   | 0    | 1    | 1   | 0   | 0   | 16  |
| H/TOT | 73     | 13  | 1    | 0    | 0   | 0   | 0   | 87  | 21     | 6   | 1    | 1    | 1   | 0   | 0   | 30  |
| P/TOT | 370    | 63  | 10   | 7    | 3   | 1   | 0   | 454 | 138    | 43  | 9    | 4    | 3   | 0   | 0   | 197 |

| TIME  | C to E |     |      |      |     |     |     | TOT | C to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 24     | 7   | 2    | 1    | 0   | 0   | 0   | 34  | 10     | 1   | 0    | 0    | 0   | 0   | 0   | 11  |
| 16:15 | 31     | 3   | 0    | 0    | 0   | 1   | 0   | 35  | 20     | 3   | 0    | 0    | 0   | 0   | 0   | 23  |
| 16:30 | 28     | 5   | 1    | 0    | 0   | 0   | 0   | 34  | 10     | 1   | 0    | 2    | 0   | 0   | 0   | 13  |
| 16:45 | 27     | 10  | 0    | 0    | 0   | 0   | 0   | 37  | 18     | 3   | 0    | 0    | 0   | 0   | 0   | 21  |
| H/TOT | 110    | 25  | 3    | 1    | 0   | 1   | 0   | 140 | 58     | 8   | 0    | 2    | 0   | 0   | 0   | 68  |
| 17:00 | 18     | 6   | 1    | 0    | 1   | 0   | 0   | 26  | 9      | 5   | 0    | 0    | 0   | 0   | 0   | 14  |
| 17:15 | 35     | 1   | 0    | 0    | 1   | 0   | 0   | 37  | 13     | 3   | 0    | 0    | 0   | 0   | 0   | 16  |
| 17:30 | 35     | 4   | 0    | 0    | 0   | 0   | 0   | 39  | 20     | 4   | 0    | 0    | 0   | 0   | 0   | 24  |
| 17:45 | 36     | 3   | 0    | 0    | 0   | 0   | 0   | 39  | 16     | 2   | 0    | 0    | 0   | 0   | 0   | 18  |
| H/TOT | 124    | 14  | 1    | 0    | 2   | 0   | 0   | 141 | 58     | 14  | 0    | 0    | 0   | 0   | 0   | 72  |
| 18:00 | 27     | 1   | 0    | 0    | 1   | 0   | 0   | 29  | 14     | 3   | 0    | 0    | 1   | 0   | 0   | 18  |
| 18:15 | 33     | 1   | 0    | 0    | 0   | 0   | 0   | 34  | 16     | 3   | 1    | 0    | 0   | 0   | 0   | 20  |
| H/TOT | 60     | 2   | 0    | 0    | 1   | 0   | 0   | 63  | 30     | 6   | 1    | 0    | 1   | 0   | 0   | 38  |
| P/TOT | 294    | 41  | 4    | 1    | 3   | 1   | 0   | 344 | 146    | 28  | 1    | 2    | 1   | 0   | 0   | 178 |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | C to C |     |      |      |     |     |     | TOT | D to C |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 23     | 8   | 1    | 1    | 0   | 0   | 0   | 33  |
| 07:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 26     | 11  | 2    | 0    | 0   | 0   | 0   | 39  |
| 07:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 31     | 6   | 1    | 2    | 0   | 0   | 0   | 40  |
| 07:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 45     | 9   | 1    | 0    | 0   | 0   | 0   | 55  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 125    | 34  | 5    | 3    | 0   | 0   | 0   | 167 |
| 08:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 35     | 10  | 0    | 1    | 0   | 0   | 0   | 46  |
| 08:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 43     | 5   | 0    | 1    | 0   | 0   | 0   | 49  |
| 08:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 19     | 7   | 0    | 2    | 0   | 0   | 0   | 28  |
| 08:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 24     | 9   | 2    | 1    | 1   | 0   | 1   | 38  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 121    | 31  | 2    | 5    | 1   | 0   | 1   | 161 |
| 09:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 22     | 6   | 1    | 1    | 0   | 0   | 0   | 30  |
| 09:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 31     | 6   | 0    | 1    | 0   | 0   | 0   | 38  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 53     | 12  | 1    | 2    | 0   | 0   | 0   | 68  |
| P/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 299    | 77  | 8    | 10   | 1   | 0   | 1   | 396 |

| TIME  | C to C |     |      |      |     |     |     | TOT | D to C |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 50     | 10  | 1    | 0    | 0   | 1   | 0   | 62  |
| 16:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 62     | 11  | 1    | 0    | 0   | 0   | 0   | 74  |
| 16:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 72     | 7   | 0    | 0    | 1   | 0   | 0   | 80  |
| 16:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 85     | 8   | 1    | 0    | 2   | 0   | 0   | 96  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 269    | 36  | 3    | 0    | 3   | 1   | 0   | 312 |
| 17:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 62     | 10  | 1    | 0    | 0   | 0   | 0   | 73  |
| 17:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 57     | 12  | 1    | 0    | 1   | 1   | 0   | 72  |
| 17:30 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 64     | 4   | 1    | 0    | 0   | 0   | 1   | 70  |
| 17:45 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 49     | 4   | 0    | 0    | 0   | 0   | 0   | 53  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 232    | 30  | 3    | 0    | 1   | 1   | 1   | 268 |
| 18:00 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 42     | 1   | 0    | 1    | 0   | 1   | 0   | 45  |
| 18:15 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 38     | 4   | 0    | 0    | 1   | 0   | 0   | 43  |
| H/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 80     | 5   | 0    | 1    | 1   | 1   | 0   | 88  |
| P/TOT | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   | 581    | 71  | 6    | 1    | 5   | 3   | 1   | 668 |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | D to B |     |      |      |     |     |     | TOT | D to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 46     | 2   | 1    | 0    | 0   | 0   | 0   | 49  | 1      | 0   | 1    | 0    | 0   | 0   | 0   | 2   |
| 07:15 | 59     | 5   | 4    | 1    | 0   | 0   | 0   | 69  | 2      | 0   | 1    | 0    | 0   | 0   | 0   | 3   |
| 07:30 | 69     | 6   | 2    | 2    | 0   | 0   | 0   | 79  | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 07:45 | 70     | 7   | 1    | 0    | 0   | 0   | 0   | 78  | 2      | 1   | 0    | 0    | 0   | 0   | 0   | 3   |
| H/TOT | 244    | 20  | 8    | 3    | 0   | 0   | 0   | 275 | 6      | 1   | 2    | 0    | 0   | 0   | 0   | 9   |
| 08:00 | 51     | 9   | 3    | 0    | 0   | 0   | 0   | 63  | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 08:15 | 65     | 9   | 1    | 0    | 0   | 0   | 0   | 75  | 4      | 0   | 1    | 0    | 0   | 0   | 0   | 5   |
| 08:30 | 34     | 7   | 3    | 2    | 0   | 0   | 0   | 46  | 7      | 0   | 0    | 0    | 0   | 0   | 0   | 7   |
| 08:45 | 54     | 4   | 2    | 1    | 0   | 0   | 0   | 61  | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| H/TOT | 204    | 29  | 9    | 3    | 0   | 0   | 0   | 245 | 16     | 0   | 1    | 0    | 0   | 0   | 0   | 17  |
| 09:00 | 39     | 6   | 4    | 1    | 0   | 0   | 0   | 50  | 5      | 2   | 0    | 0    | 0   | 0   | 0   | 7   |
| 09:15 | 33     | 3   | 1    | 2    | 0   | 0   | 0   | 39  | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| H/TOT | 72     | 9   | 5    | 3    | 0   | 0   | 0   | 89  | 7      | 2   | 0    | 0    | 0   | 0   | 0   | 9   |
| P/TOT | 520    | 58  | 22   | 9    | 0   | 0   | 0   | 609 | 29     | 3   | 3    | 0    | 0   | 0   | 0   | 35  |

| TIME  | D to B |     |      |      |     |     |     | TOT | D to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 45     | 6   | 3    | 0    | 0   | 0   | 0   | 54  | 8      | 0   | 0    | 0    | 0   | 0   | 0   | 8   |
| 16:15 | 37     | 4   | 1    | 2    | 0   | 0   | 0   | 44  | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| 16:30 | 40     | 7   | 0    | 1    | 0   | 0   | 0   | 48  | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   |
| 16:45 | 56     | 3   | 1    | 0    | 0   | 0   | 0   | 60  | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| H/TOT | 178    | 20  | 5    | 3    | 0   | 0   | 0   | 206 | 15     | 0   | 0    | 0    | 0   | 0   | 0   | 15  |
| 17:00 | 49     | 3   | 1    | 1    | 1   | 0   | 0   | 55  | 1      | 0   | 0    | 0    | 0   | 0   | 0   | 1   |
| 17:15 | 53     | 9   | 0    | 0    | 0   | 0   | 0   | 62  | 3      | 1   | 0    | 0    | 0   | 0   | 0   | 4   |
| 17:30 | 48     | 2   | 0    | 1    | 0   | 0   | 2   | 53  | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   |
| 17:45 | 49     | 3   | 1    | 1    | 0   | 0   | 0   | 54  | 6      | 0   | 0    | 0    | 0   | 0   | 0   | 6   |
| H/TOT | 199    | 17  | 2    | 3    | 1   | 0   | 2   | 224 | 14     | 1   | 0    | 0    | 0   | 0   | 0   | 15  |
| 18:00 | 37     | 1   | 0    | 0    | 0   | 0   | 0   | 38  | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   |
| 18:15 | 30     | 3   | 0    | 0    | 0   | 0   | 0   | 33  | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   |
| H/TOT | 67     | 4   | 0    | 0    | 0   | 0   | 0   | 71  | 6      | 1   | 0    | 0    | 0   | 0   | 0   | 7   |
| P/TOT | 444    | 41  | 7    | 6    | 1   | 0   | 2   | 501 | 35     | 2   | 0    | 0    | 0   | 0   | 0   | 37  |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | D to E |     |      |      |     |     |     | TOT | D to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 1      | 1   | 0    | 1    | 0   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:15 | 5      | 1   | 0    | 0    | 0   | 0   | 0   | 6   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:30 | 3      | 0   | 2    | 2    | 0   | 0   | 0   | 7   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:45 | 6      | 3   | 1    | 0    | 0   | 0   | 0   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 15     | 5   | 3    | 3    | 0   | 0   | 0   | 26  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:00 | 2      | 6   | 0    | 0    | 0   | 0   | 0   | 8   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:15 | 4      | 2   | 1    | 1    | 0   | 0   | 0   | 8   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:30 | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:45 | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 15     | 9   | 1    | 1    | 0   | 0   | 0   | 26  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 09:00 | 1      | 0   | 0    | 1    | 0   | 0   | 0   | 2   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 09:15 | 0      | 0   | 1    | 1    | 0   | 0   | 0   | 2   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 1      | 0   | 1    | 2    | 0   | 0   | 0   | 4   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| P/TOT | 31     | 14  | 5    | 6    | 0   | 0   | 0   | 56  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |

| TIME  | D to E |     |      |      |     |     |     | TOT | D to D |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 6      | 1   | 0    | 0    | 0   | 0   | 0   | 7   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:15 | 2      | 0   | 0    | 0    | 1   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:30 | 4      | 2   | 0    | 0    | 0   | 0   | 0   | 6   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:45 | 6      | 0   | 0    | 0    | 0   | 0   | 0   | 6   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 18     | 3   | 0    | 0    | 1   | 0   | 0   | 22  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:00 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:15 | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:30 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:45 | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 14     | 1   | 0    | 0    | 0   | 0   | 0   | 15  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 18:00 | 6      | 0   | 0    | 0    | 0   | 0   | 0   | 6   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 18:15 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 9      | 0   | 0    | 0    | 0   | 0   | 0   | 9   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| P/TOT | 41     | 4   | 0    | 0    | 1   | 0   | 0   | 46  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | E to D |     |      |      |     |     |     | TOT | E to C |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 3      | 2   | 2    | 0    | 0   | 0   | 0   | 7   | 26     | 4   | 2    | 0    | 0   | 1   | 0   | 33  |
| 07:15 | 5      | 1   | 1    | 0    | 0   | 0   | 0   | 7   | 21     | 9   | 1    | 1    | 1   | 0   | 0   | 33  |
| 07:30 | 5      | 1   | 1    | 0    | 0   | 0   | 0   | 7   | 27     | 10  | 1    | 0    | 0   | 0   | 0   | 38  |
| 07:45 | 1      | 1   | 0    | 0    | 0   | 0   | 0   | 2   | 25     | 11  | 3    | 0    | 0   | 0   | 1   | 40  |
| H/TOT | 14     | 5   | 4    | 0    | 0   | 0   | 0   | 23  | 99     | 34  | 7    | 1    | 1   | 1   | 1   | 144 |
| 08:00 | 3      | 2   | 1    | 1    | 0   | 0   | 0   | 7   | 17     | 10  | 2    | 0    | 0   | 0   | 0   | 29  |
| 08:15 | 5      | 1   | 0    | 0    | 0   | 0   | 0   | 6   | 20     | 9   | 1    | 1    | 0   | 0   | 0   | 31  |
| 08:30 | 4      | 1   | 0    | 0    | 0   | 0   | 0   | 5   | 25     | 6   | 0    | 1    | 0   | 0   | 0   | 32  |
| 08:45 | 1      | 2   | 0    | 0    | 0   | 0   | 0   | 3   | 24     | 7   | 3    | 0    | 0   | 0   | 0   | 34  |
| H/TOT | 13     | 6   | 1    | 1    | 0   | 0   | 0   | 21  | 86     | 32  | 6    | 2    | 0   | 0   | 0   | 126 |
| 09:00 | 5      | 0   | 0    | 0    | 0   | 0   | 0   | 5   | 21     | 13  | 6    | 0    | 0   | 0   | 0   | 40  |
| 09:15 | 8      | 1   | 2    | 0    | 0   | 0   | 0   | 11  | 28     | 7   | 1    | 0    | 0   | 0   | 0   | 36  |
| H/TOT | 13     | 1   | 2    | 0    | 0   | 0   | 0   | 16  | 49     | 20  | 7    | 0    | 0   | 0   | 0   | 76  |
| P/TOT | 40     | 12  | 7    | 1    | 0   | 0   | 0   | 60  | 234    | 86  | 20   | 3    | 1   | 1   | 1   | 346 |

| TIME  | E to D |     |      |      |     |     |     | TOT | E to C |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 4      | 0   | 2    | 0    | 0   | 0   | 0   | 6   | 27     | 4   | 1    | 2    | 0   | 0   | 0   | 34  |
| 16:15 | 3      | 1   | 0    | 0    | 0   | 0   | 0   | 4   | 32     | 4   | 1    | 0    | 1   | 0   | 0   | 38  |
| 16:30 | 2      | 1   | 0    | 0    | 0   | 0   | 0   | 3   | 48     | 3   | 0    | 1    | 0   | 0   | 0   | 52  |
| 16:45 | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 22     | 2   | 0    | 0    | 0   | 1   | 0   | 25  |
| H/TOT | 11     | 2   | 2    | 0    | 0   | 0   | 0   | 15  | 129    | 13  | 2    | 3    | 1   | 1   | 0   | 149 |
| 17:00 | 1      | 3   | 1    | 0    | 0   | 0   | 0   | 5   | 42     | 0   | 1    | 1    | 0   | 0   | 0   | 44  |
| 17:15 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 38     | 4   | 0    | 0    | 0   | 0   | 0   | 42  |
| 17:30 | 4      | 0   | 0    | 0    | 0   | 0   | 0   | 4   | 39     | 5   | 0    | 0    | 0   | 0   | 1   | 45  |
| 17:45 | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 34     | 4   | 0    | 0    | 0   | 0   | 0   | 38  |
| H/TOT | 10     | 3   | 1    | 0    | 0   | 0   | 0   | 14  | 153    | 13  | 1    | 1    | 0   | 0   | 1   | 169 |
| 18:00 | 4      | 1   | 2    | 0    | 0   | 0   | 2   | 9   | 33     | 0   | 0    | 0    | 1   | 1   | 0   | 35  |
| 18:15 | 2      | 0   | 0    | 0    | 0   | 0   | 0   | 2   | 39     | 3   | 2    | 0    | 0   | 0   | 0   | 44  |
| H/TOT | 6      | 1   | 2    | 0    | 0   | 0   | 2   | 11  | 72     | 3   | 2    | 0    | 1   | 1   | 0   | 79  |
| P/TOT | 27     | 6   | 5    | 0    | 0   | 0   | 2   | 40  | 354    | 29  | 5    | 4    | 2   | 2   | 1   | 397 |



SITE: 1

DATE: 06/11/2024

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

DAY: Wednesday

| TIME  | E to B |     |      |      |     |     |     | TOT | E to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 07:00 | 5      | 2   | 0    | 1    | 0   | 0   | 0   | 8   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:15 | 5      | 1   | 0    | 0    | 1   | 0   | 0   | 7   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:30 | 11     | 5   | 0    | 1    | 0   | 0   | 0   | 17  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 07:45 | 6      | 4   | 1    | 0    | 0   | 0   | 0   | 11  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 27     | 12  | 1    | 2    | 1   | 0   | 0   | 43  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:00 | 9      | 2   | 0    | 2    | 0   | 0   | 0   | 13  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:15 | 3      | 0   | 0    | 0    | 0   | 0   | 0   | 3   | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:30 | 10     | 5   | 1    | 2    | 0   | 0   | 0   | 18  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 08:45 | 10     | 3   | 0    | 2    | 1   | 0   | 0   | 16  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 32     | 10  | 1    | 6    | 1   | 0   | 0   | 50  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 09:00 | 14     | 3   | 2    | 0    | 0   | 0   | 0   | 19  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 09:15 | 14     | 3   | 0    | 1    | 0   | 0   | 0   | 18  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 28     | 6   | 2    | 1    | 0   | 0   | 0   | 37  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| P/TOT | 87     | 28  | 4    | 9    | 2   | 0   | 0   | 130 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |

| TIME  | E to B |     |      |      |     |     |     | TOT | E to A |     |      |      |     |     |     | TOT |
|-------|--------|-----|------|------|-----|-----|-----|-----|--------|-----|------|------|-----|-----|-----|-----|
|       | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     | CAR    | LGV | OGV1 | OGV2 | PSV | MCL | PCL |     |
| 16:00 | 16     | 2   | 1    | 1    | 0   | 0   | 0   | 20  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:15 | 12     | 2   | 0    | 1    | 1   | 0   | 0   | 16  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:30 | 8      | 4   | 0    | 0    | 0   | 0   | 0   | 12  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 16:45 | 10     | 2   | 0    | 1    | 1   | 0   | 0   | 14  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 46     | 10  | 1    | 3    | 2   | 0   | 0   | 62  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:00 | 12     | 1   | 1    | 0    | 0   | 0   | 0   | 14  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:15 | 8      | 2   | 0    | 0    | 0   | 0   | 0   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:30 | 7      | 1   | 0    | 0    | 2   | 0   | 0   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 17:45 | 13     | 2   | 0    | 0    | 0   | 0   | 0   | 15  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 40     | 6   | 1    | 0    | 2   | 0   | 0   | 49  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 18:00 | 13     | 0   | 0    | 0    | 0   | 0   | 0   | 13  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| 18:15 | 9      | 0   | 0    | 0    | 1   | 0   | 0   | 10  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| H/TOT | 22     | 0   | 0    | 0    | 1   | 0   | 0   | 23  | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |
| P/TOT | 108    | 16  | 2    | 3    | 5   | 0   | 0   | 134 | 0      | 0   | 0    | 0    | 0   | 0   | 0   | 0   |

SITE: 1

LOCATION: A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road

| TIME         | JUNCTION TOTAL |            |            |           |           |          |          | TOT         |
|--------------|----------------|------------|------------|-----------|-----------|----------|----------|-------------|
|              | CAR            | LGV        | OGV1       | OGV2      | PSV       | MCL      | PCL      |             |
| 07:00        | 260            | 40         | 10         | 5         | 1         | 1        | 0        | 317         |
| 07:15        | 286            | 64         | 16         | 4         | 3         | 1        | 1        | 375         |
| 07:30        | 324            | 60         | 14         | 10        | 4         | 1        | 1        | 414         |
| 07:45        | 338            | 72         | 15         | 1         | 2         | 0        | 1        | 429         |
| <b>H/TOT</b> | <b>1208</b>    | <b>236</b> | <b>55</b>  | <b>20</b> | <b>10</b> | <b>3</b> | <b>3</b> | <b>1535</b> |
| 08:00        | 324            | 74         | 13         | 7         | 5         | 0        | 0        | 423         |
| 08:15        | 300            | 59         | 10         | 9         | 0         | 0        | 0        | 378         |
| 08:30        | 248            | 51         | 12         | 12        | 1         | 0        | 0        | 324         |
| 08:45        | 273            | 43         | 10         | 7         | 2         | 0        | 1        | 336         |
| <b>H/TOT</b> | <b>1145</b>    | <b>227</b> | <b>45</b>  | <b>35</b> | <b>8</b>  | <b>0</b> | <b>1</b> | <b>1461</b> |
| 09:00        | 235            | 56         | 17         | 4         | 0         | 0        | 0        | 312         |
| 09:15        | 233            | 40         | 10         | 7         | 1         | 0        | 0        | 291         |
| <b>H/TOT</b> | <b>468</b>     | <b>96</b>  | <b>27</b>  | <b>11</b> | <b>1</b>  | <b>0</b> | <b>0</b> | <b>603</b>  |
| <b>P/TOT</b> | <b>2821</b>    | <b>559</b> | <b>127</b> | <b>66</b> | <b>19</b> | <b>3</b> | <b>4</b> | <b>3599</b> |

| PEAK HOUR CALCULATION | TOT         |
|-----------------------|-------------|
| 07:00 to 08:00        | 1535        |
| 07:15 to 08:15        | 1641        |
| 07:30 to 08:30        | <b>1644</b> |
| 07:45 to 08:45        | 1554        |
| 08:00 to 09:00        | 1461        |
| 08:15 to 09:15        | 1350        |
| 08:30 to 09:30        | <b>1263</b> |
| <b>A.M. Peak</b>      | <b>1644</b> |

| TIME         | JUNCTION TOTAL |            |           |           |           |           |          | TOT         |
|--------------|----------------|------------|-----------|-----------|-----------|-----------|----------|-------------|
|              | CAR            | LGV        | OGV1      | OGV2      | PSV       | MCL       | PCL      |             |
| 16:00        | 278            | 56         | 13        | 8         | 2         | 3         | 0        | 360         |
| 16:15        | 327            | 56         | 8         | 10        | 3         | 1         | 0        | 405         |
| 16:30        | 331            | 41         | 2         | 6         | 2         | 0         | 0        | 382         |
| 16:45        | 326            | 36         | 2         | 4         | 3         | 2         | 0        | 373         |
| <b>H/TOT</b> | <b>1262</b>    | <b>189</b> | <b>25</b> | <b>28</b> | <b>10</b> | <b>6</b>  | <b>0</b> | <b>1520</b> |
| 17:00        | 345            | 37         | 8         | 4         | 3         | 0         | 0        | 397         |
| 17:15        | 363            | 42         | 3         | 1         | 2         | 1         | 0        | 412         |
| 17:30        | 362            | 25         | 4         | 3         | 2         | 0         | 4        | 400         |
| 17:45        | 317            | 26         | 2         | 2         | 0         | 0         | 1        | 348         |
| <b>H/TOT</b> | <b>1387</b>    | <b>130</b> | <b>17</b> | <b>10</b> | <b>7</b>  | <b>1</b>  | <b>5</b> | <b>1557</b> |
| 18:00        | 265            | 14         | 4         | 2         | 4         | 2         | 3        | 294         |
| 18:15        | 257            | 18         | 3         | 1         | 2         | 1         | 0        | 282         |
| <b>H/TOT</b> | <b>522</b>     | <b>32</b>  | <b>7</b>  | <b>3</b>  | <b>6</b>  | <b>3</b>  | <b>3</b> | <b>576</b>  |
| <b>P/TOT</b> | <b>3171</b>    | <b>351</b> | <b>49</b> | <b>41</b> | <b>23</b> | <b>10</b> | <b>8</b> | <b>3653</b> |

| PEAK HOUR CALCULATION | TOT         |
|-----------------------|-------------|
| 16:00 to 17:00        | 1520        |
| 16:15 to 17:15        | 1557        |
| 16:30 to 17:30        | 1564        |
| 16:45 to 17:45        | <b>1582</b> |
| 17:00 to 18:00        | 1557        |
| 17:15 to 18:15        | 1454        |
| 17:30 to 18:30        | <b>1324</b> |
| <b>P.M. Peak</b>      | <b>1582</b> |



|                                                                                    |                  |                                                                                     |                |                                    |             |          |           |    |
|------------------------------------------------------------------------------------|------------------|-------------------------------------------------------------------------------------|----------------|------------------------------------|-------------|----------|-----------|----|
|  | Site / Location: | Site 1 - A629 Land Head Road / Penistone Road / A635 Holmfirth Road / Barnsley Road | Project No:    | 16082                              | Drawing No: | 16082-01 | Drawn By: | DC |
|                                                                                    | Survey Date:     | Wednesday 6th November 2024                                                         | Project Name:  | Shepley                            |             |          |           |    |
|                                                                                    | Survey Times:    | 0700 – 0930 / 1600 – 1830                                                           | Drawing Title: | Site Layout and Observed Movements |             |          |           |    |

Site: 1  
Location: A629 Land Head Road / Peristone Road / A635 Holmfirth Road / Barnsley Road  
Date: Wednesday 6 November 2024

| Time      | ARMA   |        |
|-----------|--------|--------|
|           | Lane 1 | Lane 2 |
| 07:00     | 1      | 0      |
| 07:05     | 0      | 0      |
| 07:10     | 0      | 0      |
| 07:15     | 1      | 0      |
| 07:20     | 2      | 0      |
| 07:25     | 1      | 0      |
| 07:30     | 2      | 0      |
| 07:35     | 1      | 0      |
| 07:40     | 1      | 0      |
| 07:45     | 1      | 0      |
| 07:50     | 2      | 0      |
| 07:55     | 1      | 0      |
| 08:00     | 1      | 0      |
| 08:05     | 1      | 0      |
| 08:10     | 1      | 0      |
| 08:15     | 1      | 0      |
| 08:20     | 1      | 0      |
| 08:25     | 1      | 0      |
| 08:30     | 1      | 0      |
| 08:35     | 1      | 0      |
| 08:40     | 1      | 0      |
| 08:45     | 0      | 0      |
| 08:50     | 1      | 0      |
| 08:55     | 1      | 0      |
| 09:00     | 1      | 0      |
| 09:05     | 1      | 0      |
| 09:10     | 1      | 0      |
| 09:15     | 1      | 0      |
| 09:20     | 0      | 0      |
| 09:25     | 1      | 0      |
| Max Queue | 2      | 0      |

| Time      | ARMB   |        |
|-----------|--------|--------|
|           | Lane 1 | Lane 2 |
| 07:00     | 0      | 1      |
| 07:05     | 0      | 0      |
| 07:10     | 0      | 0      |
| 07:15     | 5      | 0      |
| 07:20     | 0      | 1      |
| 07:25     | 0      | 1      |
| 07:30     | 0      | 1      |
| 07:35     | 0      | 3      |
| 07:40     | 2      | 1      |
| 07:45     | 0      | 1      |
| 07:50     | 0      | 1      |
| 07:55     | 6      | 1      |
| 08:00     | 9      | 0      |
| 08:05     | 0      | 1      |
| 08:10     | 0      | 2      |
| 08:15     | 0      | 1      |
| 08:20     | 0      | 1      |
| 08:25     | 0      | 1      |
| 08:30     | 0      | 0      |
| 08:35     | 0      | 0      |
| 08:40     | 0      | 0      |
| 08:45     | 0      | 1      |
| 08:50     | 0      | 0      |
| 08:55     | 0      | 2      |
| 09:00     | 0      | 1      |
| 09:05     | 0      | 0      |
| 09:10     | 0      | 0      |
| 09:15     | 0      | 0      |
| 09:20     | 0      | 0      |
| 09:25     | 0      | 0      |
| Max Queue | 9      | 3      |

| Time      | ARMC   |        |
|-----------|--------|--------|
|           | Lane 1 | Lane 2 |
| 07:00     | 7      | 0      |
| 07:05     | 6      | 0      |
| 07:10     | 11     | 0      |
| 07:15     | 13     | 0      |
| 07:20     | 9      | 0      |
| 07:25     | 11     | 0      |
| 07:30     | 10     | 0      |
| 07:35     | 10     | 0      |
| 07:40     | 11     | 0      |
| 07:45     | 12     | 0      |
| 07:50     | 10     | 0      |
| 07:55     | 11     | 0      |
| 08:00     | 13     | 0      |
| 08:05     | 23     | 0      |
| 08:10     | 10     | 0      |
| 08:15     | 10     | 0      |
| 08:20     | 12     | 0      |
| 08:25     | 5      | 0      |
| 08:30     | 5      | 0      |
| 08:35     | 5      | 0      |
| 08:40     | 9      | 0      |
| 08:45     | 13     | 0      |
| 08:50     | 11     | 0      |
| 08:55     | 6      | 0      |
| 09:00     | 7      | 0      |
| 09:05     | 5      | 0      |
| 09:10     | 3      | 0      |
| 09:15     | 6      | 0      |
| 09:20     | 3      | 0      |
| 09:25     | 3      | 0      |
| Max Queue | 23     | 0      |

| Time      | ARMD   |        |
|-----------|--------|--------|
|           | Lane 1 | Lane 2 |
| 07:00     | 0      | 0      |
| 07:05     | 0      | 1      |
| 07:10     | 0      | 2      |
| 07:15     | 0      | 1      |
| 07:20     | 0      | 1      |
| 07:25     | 0      | 1      |
| 07:30     | 0      | 1      |
| 07:35     | 2      | 1      |
| 07:40     | 5      | 0      |
| 07:45     | 0      | 1      |
| 07:50     | 0      | 2      |
| 07:55     | 1      | 1      |
| 08:00     | 0      | 1      |
| 08:05     | 1      | 0      |
| 08:10     | 1      | 0      |
| 08:15     | 0      | 1      |
| 08:20     | 0      | 1      |
| 08:25     | 0      | 1      |
| 08:30     | 0      | 0      |
| 08:35     | 0      | 1      |
| 08:40     | 0      | 1      |
| 08:45     | 0      | 0      |
| 08:50     | 0      | 1      |
| 08:55     | 0      | 0      |
| 09:00     | 3      | 0      |
| 09:05     | 0      | 0      |
| 09:10     | 0      | 0      |
| 09:15     | 0      | 0      |
| 09:20     | 0      | 0      |
| 09:25     | 0      | 2      |
| Max Queue | 5      | 2      |

| Time      | ARME   |        |
|-----------|--------|--------|
|           | Lane 1 | Lane 2 |
| 07:00     | 3      | 0      |
| 07:05     | 3      | 0      |
| 07:10     | 5      | 1      |
| 07:15     | 6      | 0      |
| 07:20     | 4      | 0      |
| 07:25     | 6      | 1      |
| 07:30     | 5      | 0      |
| 07:35     | 8      | 1      |
| 07:40     | 9      | 0      |
| 07:45     | 6      | 0      |
| 07:50     | 7      | 0      |
| 07:55     | 7      | 0      |
| 08:00     | 4      | 1      |
| 08:05     | 5      | 1      |
| 08:10     | 4      | 0      |
| 08:15     | 4      | 0      |
| 08:20     | 3      | 0      |
| 08:25     | 3      | 0      |
| 08:30     | 5      | 0      |
| 08:35     | 7      | 0      |
| 08:40     | 4      | 0      |
| 08:45     | 6      | 0      |
| 08:50     | 6      | 0      |
| 08:55     | 10     | 0      |
| 09:00     | 13     | 0      |
| 09:05     | 5      | 1      |
| 09:10     | 5      | 0      |
| 09:15     | 10     | 0      |
| 09:20     | 3      | 0      |
| 09:25     | 7      | 1      |
| Max Queue | 13     | 1      |

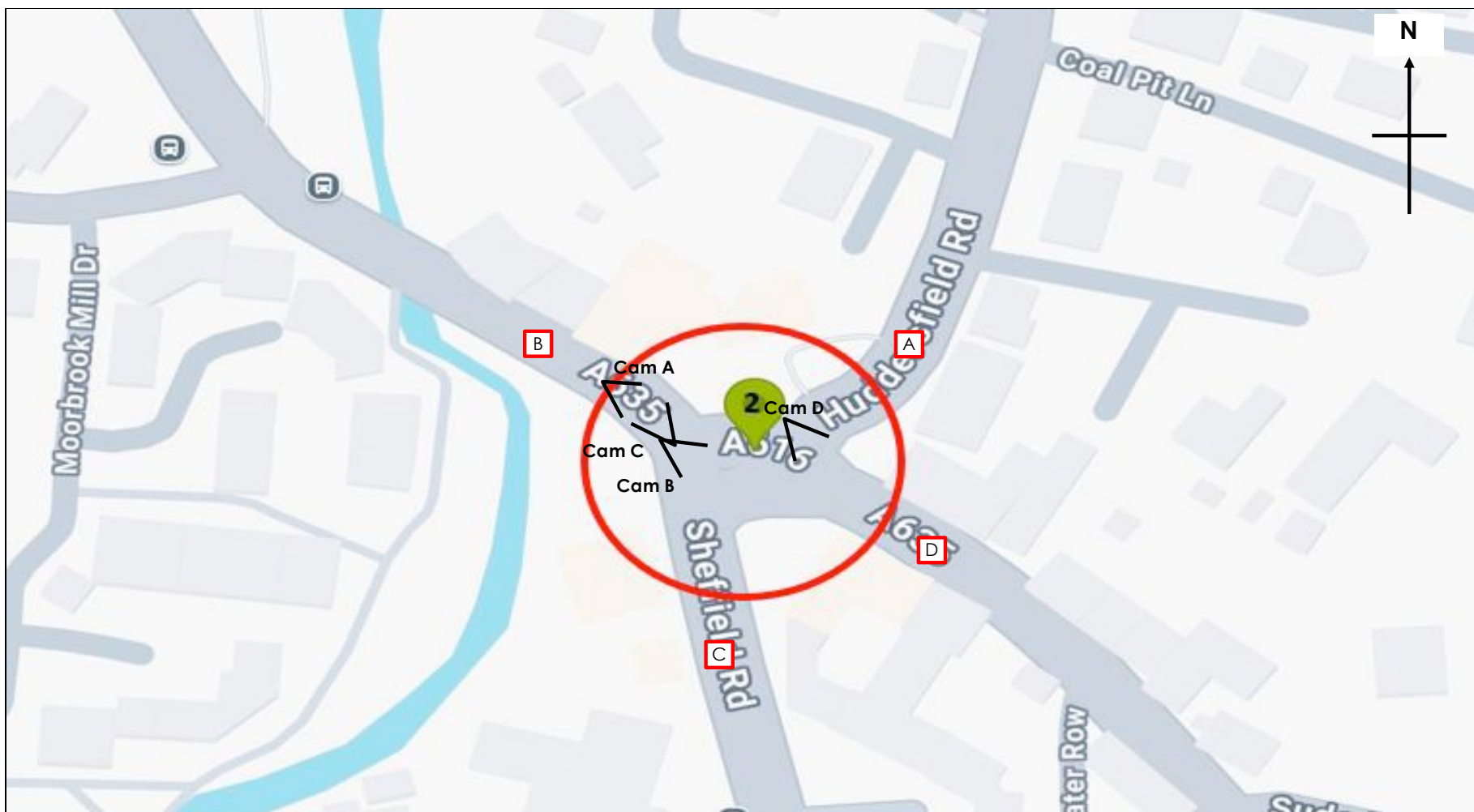
| Time      | ARMA   |        |
|-----------|--------|--------|
|           | Lane 1 | Lane 2 |
| 16:00     | 1      | 0      |
| 16:05     | 2      | 0      |
| 16:10     | 2      | 0      |
| 16:15     | 1      | 0      |
| 16:20     | 2      | 0      |
| 16:25     | 2      | 0      |
| 16:30     | 1      | 0      |
| 16:35     | 0      | 0      |
| 16:40     | 2      | 0      |
| 16:45     | 1      | 0      |
| 16:50     | 1      | 0      |
| 16:55     | 1      | 0      |
| 17:00     | 1      | 0      |
| 17:05     | 1      | 0      |
| 17:10     | 2      | 1      |
| 17:15     | 1      | 0      |
| 17:20     | 2      | 0      |
| 17:25     | 1      | 0      |
| 17:30     | 1      | 1      |
| 17:35     | 1      | 0      |
| 17:40     | 1      | 0      |
| 17:45     | 1      | 0      |
| 17:50     | 2      | 0      |
| 17:55     | 1      | 0      |
| 18:00     | 1      | 0      |
| 18:05     | 2      | 0      |
| 18:10     | 2      | 0      |
| 18:15     | 1      | 0      |
| 18:20     | 2      | 0      |
| 18:25     | 1      | 0      |
| Max Queue | 2      | 1      |

| Time      | ARMB   |        |
|-----------|--------|--------|
|           | Lane 1 | Lane 2 |
| 16:00     | 0      | 0      |
| 16:05     | 0      | 1      |
| 16:10     | 0      | 1      |
| 16:15     | 0      | 1      |
| 16:20     | 10     | 0      |
| 16:25     | 0      | 0      |
| 16:30     | 0      | 1      |
| 16:35     | 0      | 2      |
| 16:40     | 0      | 1      |
| 16:45     | 0      | 0      |
| 16:50     | 0      | 1      |
| 16:55     | 2      | 1      |
| 17:00     | 0      | 1      |
| 17:05     | 3      | 1      |
| 17:10     | 0      | 0      |
| 17:15     | 0      | 0      |
| 17:20     | 0      | 1      |
| 17:25     | 0      | 1      |
| 17:30     | 0      | 0      |
| 17:35     | 0      | 1      |
| 17:40     | 0      | 0      |
| 17:45     | 0      | 1      |
| 17:50     | 1      | 0      |
| 17:55     | 0      | 0      |
| 18:00     | 0      | 1      |
| 18:05     | 0      | 0      |
| 18:10     | 0      | 2      |
| 18:15     | 0      | 1      |
| 18:20     | 0      | 1      |
| 18:25     | 0      | 0      |
| Max Queue | 10     | 2      |

| Time      | ARMC   |        |
|-----------|--------|--------|
|           | Lane 1 | Lane 2 |
| 16:00     | 5      | 0      |
| 16:05     | 4      | 0      |
| 16:10     | 10     | 0      |
| 16:15     | 13     | 1      |
| 16:20     | 14     | 0      |
| 16:25     | 8      | 0      |
| 16:30     | 3      | 0      |
| 16:35     | 6      | 1      |
| 16:40     | 7      | 0      |
| 16:45     | 6      | 0      |
| 16:50     | 7      | 0      |
| 16:55     | 5      | 0      |
| 17:00     | 4      | 0      |
| 17:05     | 9      | 0      |
| 17:10     | 9      | 1      |
| 17:15     | 13     | 0      |
| 17:20     | 16     | 0      |
| 17:25     | 6      | 0      |
| 17:30     | 24     | 0      |
| 17:35     | 27     | 0      |
| 17:40     | 19     | 0      |
| 17:45     | 16     | 0      |
| 17:50     | 22     | 0      |
| 17:55     | 11     | 0      |
| 18:00     | 8      | 0      |
| 18:05     | 7      | 0      |
| 18:10     | 4      | 0      |
| 18:15     | 7      | 0      |
| 18:20     | 5      | 0      |
| 18:25     | 5      | 0      |
| Max Queue | 27     | 1      |

| Time      | ARMD   |        |
|-----------|--------|--------|
|           | Lane 1 | Lane 2 |
| 16:00     | 0      | 1      |
| 16:05     | 0      | 0      |
| 16:10     | 0      | 0      |
| 16:15     | 0      | 0      |
| 16:20     | 3      | 1      |
| 16:25     | 1      | 0      |
| 16:30     | 0      | 0      |
| 16:35     | 0      | 1      |
| 16:40     | 1      | 1      |
| 16:45     | 0      | 1      |
| 16:50     | 0      | 1      |
| 16:55     | 0      | 0      |
| 17:00     | 0      | 0      |
| 17:05     | 0      | 0      |
| 17:10     | 0      | 1      |
| 17:15     | 0      | 0      |
| 17:20     | 0      | 1      |
| 17:25     | 0      | 1      |
| 17:30     | 0      | 0      |
| 17:35     | 0      | 1      |
| 17:40     | 0      | 0      |
| 17:45     | 0      | 0      |
| 17:50     | 0      | 1      |
| 17:55     | 0      | 0      |
| 18:00     | 0      | 0      |
| 18:05     | 0      | 1      |
| 18:10     | 0      | 1      |
| 18:15     | 0      | 0      |
| 18:20     | 0      | 0      |
| 18:25     | 0      | 1      |
| Max Queue | 3      | 1      |

| Time      | ARME   |        |
|-----------|--------|--------|
|           | Lane 1 | Lane 2 |
| 16:00     | 12     | 0      |
| 16:05     | 7      | 0      |
| 16:10     | 8      | 0      |
| 16:15     | 12     | 0      |
| 16:20     | 11     | 0      |
| 16:25     | 10     | 0      |
| 16:30     | 12     | 0      |
| 16:35     | 12     | 0      |
| 16:40     | 11     | 0      |
| 16:45     | 4      | 0      |
| 16:50     | 5      | 0      |
| 16:55     | 11     | 0      |
| 17:00     | 12     | 0      |
| 17:05     | 8      | 0      |
| 17:10     | 8      | 0      |
| 17:15     | 10     | 0      |
| 17:20     | 13     | 0      |
| 17:25     | 13     | 0      |
| 17:30     | 7      | 0      |
| 17:35     | 7      | 0      |
| 17:40     | 3      | 1      |
| 17:45     | 6      | 0      |
| 17:50     | 10     | 0      |
| 17:55     | 6      | 0      |
| 18:00     | 4      | 0      |
| 18:05     | 5      | 0      |
| 18:10     | 5      | 0      |
| 18:15     | 4      | 0      |
| 18:20     | 8      | 0      |
| 18:25     | 9      | 0      |
| Max Queue | 13     | 1      |



|                                                                                     |                                                                 |                                                          |                             |                     |
|-------------------------------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------|-----------------------------|---------------------|
|  | <b>Site / Location:</b> Site 2 - A635/A616 junction at New Mill | <b>Project No:</b> 16082                                 | <b>Drawing No:</b> 16082-02 | <b>Drawn By:</b> DC |
|                                                                                     | <b>Survey Date:</b> Wednesday 6th November 2024                 | <b>Project Name:</b> Shepley                             |                             |                     |
|                                                                                     | <b>Survey Times:</b> 0700 – 0930 / 1600 – 1830                  | <b>Drawing Title:</b> Site Layout and Observed Movements |                             |                     |

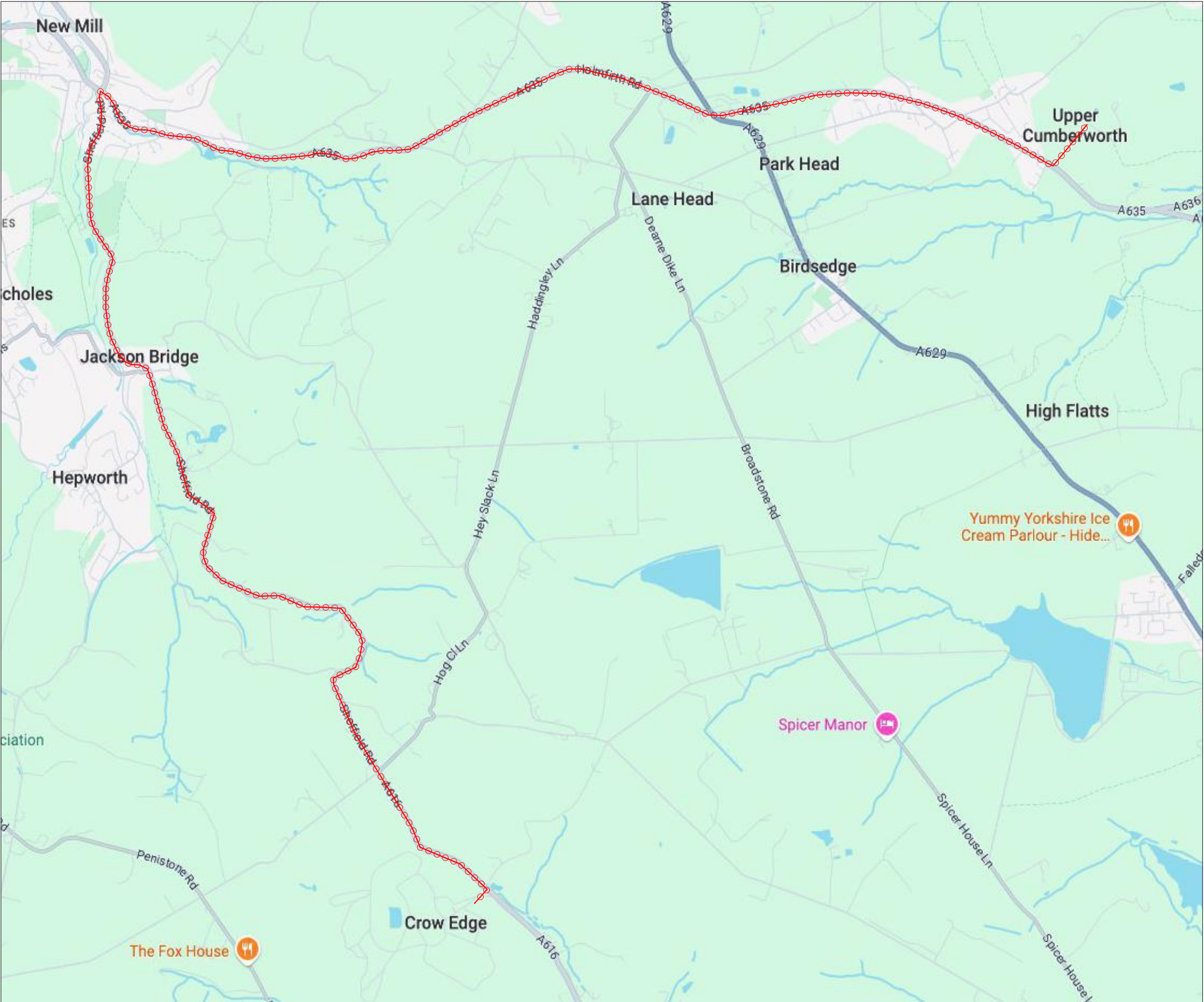
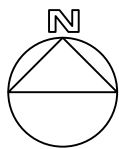
Site: 2  
Location: A635/ A616 junction at New Mill  
Date: Wednesday 6 November 2024

| Time      | ARMA   | Time      | ARMB   | Time      | ARMC   | Time      | ARMD   |        |
|-----------|--------|-----------|--------|-----------|--------|-----------|--------|--------|
|           | Lane 1 |           | Lane 1 |           | Lane 1 |           | Lane 1 | Lane 2 |
| 07:00     | 3      | 07:00     | 0      | 07:00     | 0      | 07:00     | 4      | 0      |
| 07:05     | 8      | 07:05     | 0      | 07:05     | 1      | 07:05     | 3      | 0      |
| 07:10     | 6      | 07:10     | 0      | 07:10     | 2      | 07:10     | 7      | 1      |
| 07:15     | 6      | 07:15     | 0      | 07:15     | 2      | 07:15     | 15     | 1      |
| 07:20     | 7      | 07:20     | 0      | 07:20     | 2      | 07:20     | 16     | 1      |
| 07:25     | 9      | 07:25     | 0      | 07:25     | 2      | 07:25     | 5      | 1      |
| 07:30     | 9      | 07:30     | 0      | 07:30     | 2      | 07:30     | 10     | 1      |
| 07:35     | 9      | 07:35     | 0      | 07:35     | 2      | 07:35     | 12     | 1      |
| 07:40     | 7      | 07:40     | 0      | 07:40     | 3      | 07:40     | 14     | 1      |
| 07:45     | 8      | 07:45     | 0      | 07:45     | 1      | 07:45     | 15     | 1      |
| 07:50     | 5      | 07:50     | 0      | 07:50     | 7      | 07:50     | 16     | 1      |
| 07:55     | 8      | 07:55     | 0      | 07:55     | 4      | 07:55     | 13     | 1      |
| 08:00     | 8      | 08:00     | 0      | 08:00     | 3      | 08:00     | 15     | 1      |
| 08:05     | 9      | 08:05     | 0      | 08:05     | 2      | 08:05     | 12     | 1      |
| 08:10     | 5      | 08:10     | 0      | 08:10     | 0      | 08:10     | 13     | 1      |
| 08:15     | 6      | 08:15     | 0      | 08:15     | 3      | 08:15     | 10     | 1      |
| 08:20     | 6      | 08:20     | 0      | 08:20     | 1      | 08:20     | 6      | 1      |
| 08:25     | 8      | 08:25     | 0      | 08:25     | 4      | 08:25     | 8      | 2      |
| 08:30     | 9      | 08:30     | 0      | 08:30     | 3      | 08:30     | 14     | 1      |
| 08:35     | 8      | 08:35     | 0      | 08:35     | 2      | 08:35     | 14     | 1      |
| 08:40     | 8      | 08:40     | 0      | 08:40     | 2      | 08:40     | 17     | 1      |
| 08:45     | 8      | 08:45     | 0      | 08:45     | 1      | 08:45     | 6      | 1      |
| 08:50     | 6      | 08:50     | 0      | 08:50     | 2      | 08:50     | 5      | 1      |
| 08:55     | 6      | 08:55     | 0      | 08:55     | 4      | 08:55     | 5      | 0      |
| 09:00     | 8      | 09:00     | 5      | 09:00     | 6      | 09:00     | 12     | 1      |
| 09:05     | 2      | 09:05     | 0      | 09:05     | 4      | 09:05     | 15     | 1      |
| 09:10     | 8      | 09:10     | 0      | 09:10     | 4      | 09:10     | 6      | 0      |
| 09:15     | 2      | 09:15     | 0      | 09:15     | 1      | 09:15     | 4      | 1      |
| 09:20     | 2      | 09:20     | 0      | 09:20     | 2      | 09:20     | 7      | 0      |
| 09:25     | 6      | 09:25     | 0      | 09:25     | 1      | 09:25     | 7      | 1      |
| Max Queue | 9      | Max Queue | 5      | Max Queue | 7      | Max Queue | 17     | 2      |

| Time      | ARMA   | Time      | ARMB   | Time      | ARMC   | Time      | ARMD   |        |
|-----------|--------|-----------|--------|-----------|--------|-----------|--------|--------|
|           | Lane 1 |           | Lane 1 |           | Lane 1 |           | Lane 1 | Lane 2 |
| 16:00     | 8      | 16:00     | 2      | 16:00     | 10     | 16:00     | 13     | 1      |
| 16:05     | 10     | 16:05     | 0      | 16:05     | 1      | 16:05     | 15     | 1      |
| 16:10     | 10     | 16:10     | 0      | 16:10     | 2      | 16:10     | 5      | 1      |
| 16:15     | 8      | 16:15     | 0      | 16:15     | 1      | 16:15     | 7      | 1      |
| 16:20     | 9      | 16:20     | 0      | 16:20     | 3      | 16:20     | 10     | 1      |
| 16:25     | 7      | 16:25     | 0      | 16:25     | 3      | 16:25     | 7      | 1      |
| 16:30     | 7      | 16:30     | 0      | 16:30     | 1      | 16:30     | 16     | 1      |
| 16:35     | 8      | 16:35     | 0      | 16:35     | 3      | 16:35     | 13     | 1      |
| 16:40     | 9      | 16:40     | 0      | 16:40     | 2      | 16:40     | 16     | 1      |
| 16:45     | 5      | 16:45     | 0      | 16:45     | 4      | 16:45     | 17     | 1      |
| 16:50     | 8      | 16:50     | 0      | 16:50     | 1      | 16:50     | 16     | 1      |
| 16:55     | 9      | 16:55     | 0      | 16:55     | 3      | 16:55     | 17     | 1      |
| 17:00     | 6      | 17:00     | 1      | 17:00     | 2      | 17:00     | 13     | 0      |
| 17:05     | 6      | 17:05     | 0      | 17:05     | 2      | 17:05     | 13     | 1      |
| 17:10     | 4      | 17:10     | 0      | 17:10     | 4      | 17:10     | 14     | 1      |
| 17:15     | 5      | 17:15     | 4      | 17:15     | 2      | 17:15     | 13     | 1      |
| 17:20     | 8      | 17:20     | 0      | 17:20     | 7      | 17:20     | 15     | 0      |
| 17:25     | 5      | 17:25     | 0      | 17:25     | 5      | 17:25     | 14     | 1      |
| 17:30     | 7      | 17:30     | 0      | 17:30     | 3      | 17:30     | 15     | 1      |
| 17:35     | 9      | 17:35     | 0      | 17:35     | 4      | 17:35     | 13     | 1      |
| 17:40     | 9      | 17:40     | 0      | 17:40     | 4      | 17:40     | 14     | 1      |
| 17:45     | 9      | 17:45     | 0      | 17:45     | 0      | 17:45     | 14     | 0      |
| 17:50     | 10     | 17:50     | 0      | 17:50     | 4      | 17:50     | 15     | 1      |
| 17:55     | 9      | 17:55     | 0      | 17:55     | 1      | 17:55     | 9      | 0      |
| 18:00     | 4      | 18:00     | 0      | 18:00     | 3      | 18:00     | 4      | 1      |
| 18:05     | 4      | 18:05     | 0      | 18:05     | 0      | 18:05     | 2      | 1      |
| 18:10     | 9      | 18:10     | 0      | 18:10     | 0      | 18:10     | 5      | 1      |
| 18:15     | 3      | 18:15     | 0      | 18:15     | 1      | 18:15     | 14     | 1      |
| 18:20     | 3      | 18:20     | 0      | 18:20     | 2      | 18:20     | 5      | 1      |
| 18:25     | 3      | 18:25     | 0      | 18:25     | 2      | 18:25     | 4      | 1      |
| Max Queue | 10     | Max Queue | 4      | Max Queue | 10     | Max Queue | 17     | 1      |

# Appendix B

## HGV Routing Plan



PROJECT TITLE  
BROMLEY FARM QUARRY, UPPER CUMBERWORTH

DRAWING TITLE  
HGV ROUTING PLAN

| DRAWING NUMBER | PROJECT | VEL.  | TYPE | ROLE | NUMBER |
|----------------|---------|-------|------|------|--------|
| PRGN -         | 2074 -  | HGN - | DR - | CH - | 201    |

CLIENT  
SILKSTONE ENVIRONMENTAL

| SCALE | SIZE | DRAWN | CHECKED | AUTHORISED | DATE   |
|-------|------|-------|---------|------------|--------|
| NTS   | A3   | JH    | LJO     | LJO        | DEC 24 |

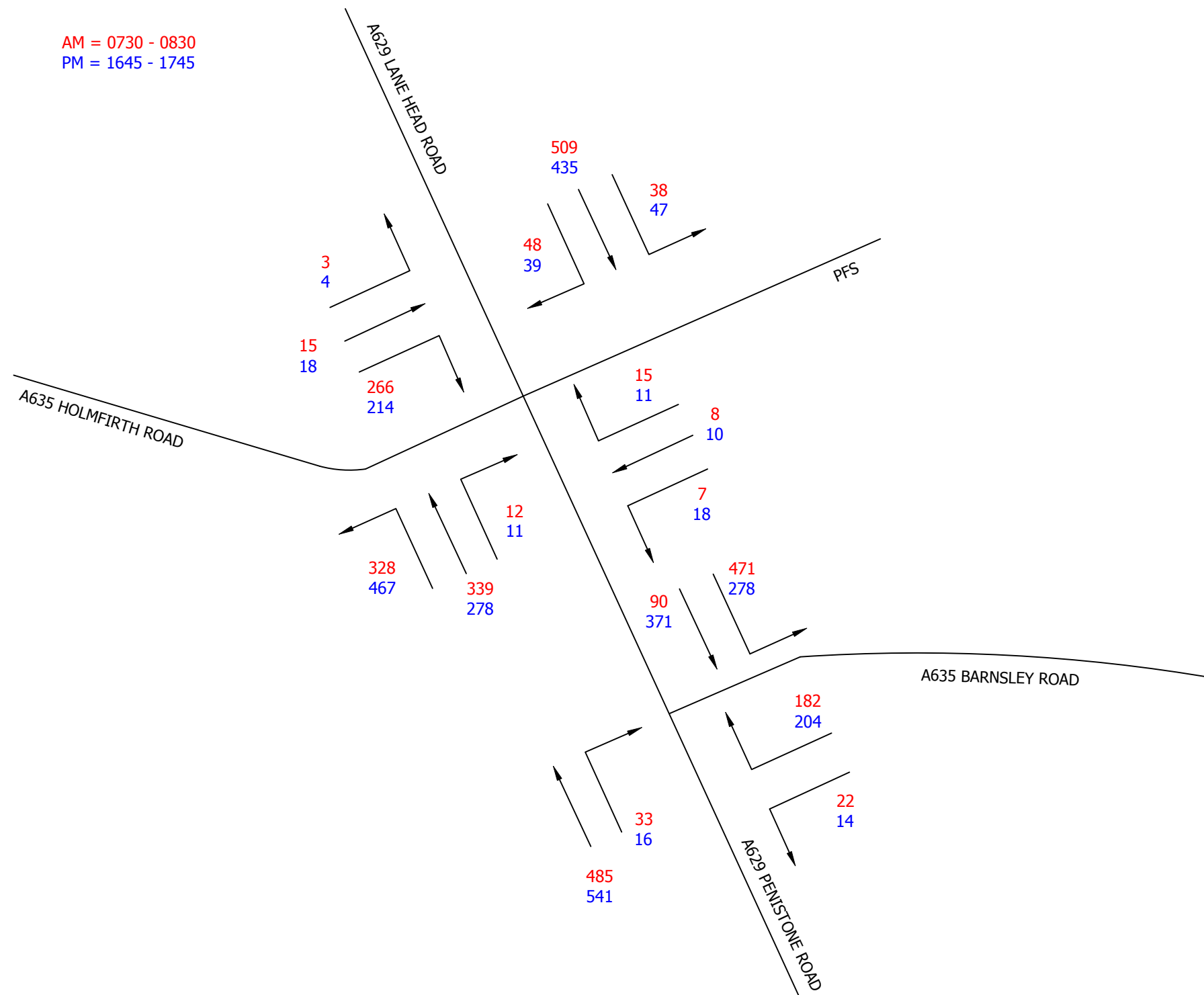
PARAGON HIGHWAYS  
PEACH HOUSE WEST, THE WALLED GARDEN  
NOSTELL ESTATE YARD  
WAKEFIELD WF4 1AB

01924 291536  
MAIL@PARAGONHIGHWAYS.COM

COPYRIGHT © 2024 PAUL HOWARTH HIGHWAY CONSULTANTS LTD T/A PARAGON HIGHWAYS

# Appendix C

## Traffic Flows



PROJECT TITLE  
BROMLEY FARM, UPPER CUMBERWORTH

DRAWING TITLE  
PEAK HOUR FLOWS -  
A629 LANE HEAD ROAD/A629 PENISTONE ROAD/A635  
HOLMFIRTH ROAD/A635 BARNSELY ROAD

| ORIGINATOR | PROJECT | VOL.  | TYPE | ROLE | NUMBER  |
|------------|---------|-------|------|------|---------|
| PRGN       | - 2074  | - HGN | - DR | - CH | - 0001A |

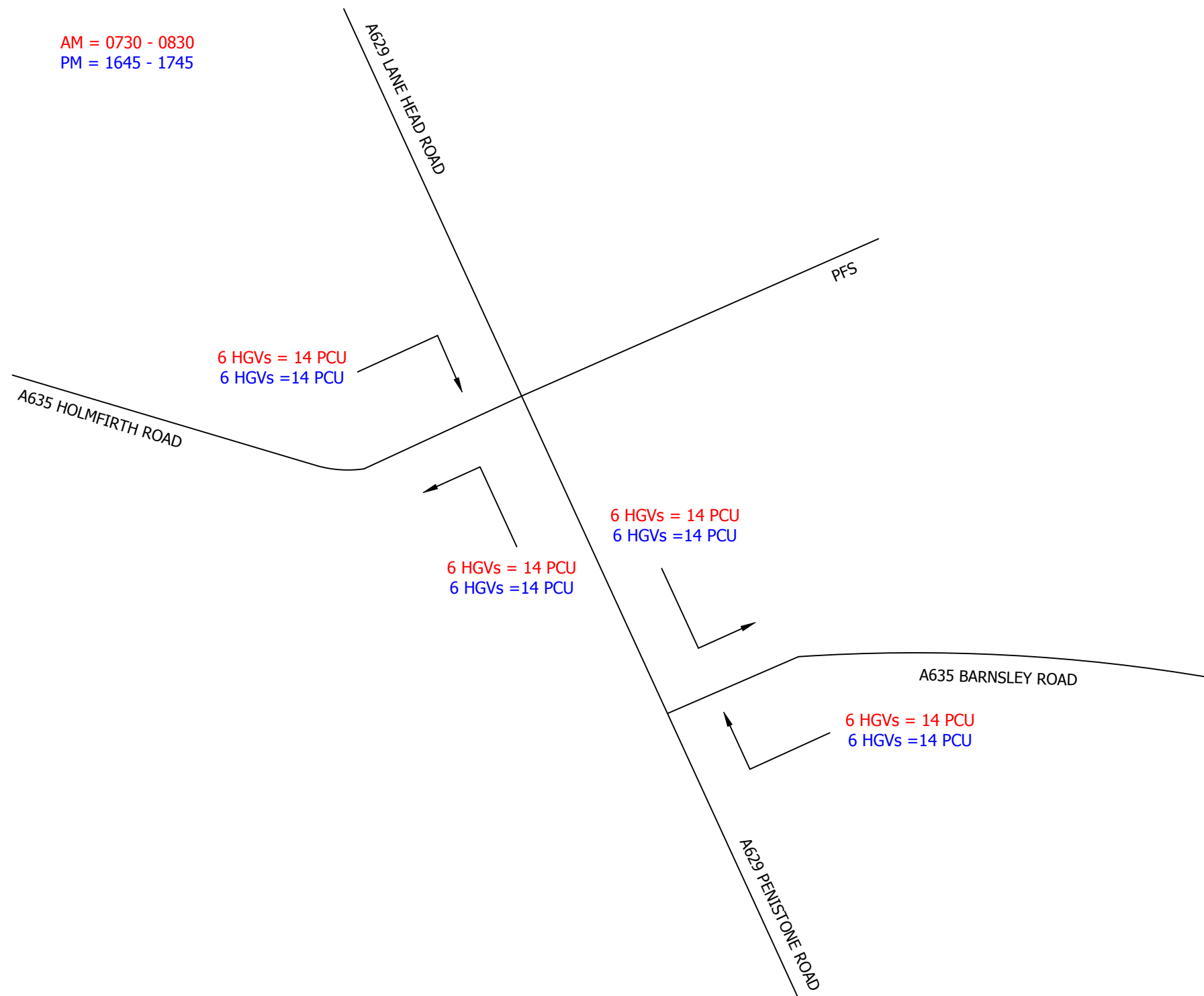
CLIENT  
SILKSTONE ENVIRONMENTAL

| SCALE | SIZE | DRAWN | CHECKED | AUTHORISED | DATE   |
|-------|------|-------|---------|------------|--------|
| NTS   | A3   | JJH   | LJO     | JJH        | MAY 24 |

PARAGON HIGHWAYS  
PEACH HOUSE WEST, THE WALLED GARDEN  
NOSTELL ESTATE YARD  
WAKEFIELD WF4 1AB

01924 291536  
MAIL@PARAGONHIGHWAYS.COM

COPYRIGHT © 2024 PAUL HOWARTH HIGHWAY CONSULTANTS LTD T/A PARAGON HIGHWAYS



PROJECT TITLE  
BROMLEY FARM, UPPER CUMBERWORTH

DRAWING TITLE  
PEAK HOUR FLOWS –  
DEVELOPMENT TRAFFIC (HGV MOVEMENTS)

DRAWING NUMBER  
ORIGINATOR PROJECT VOL. TYPE ROLE NUMBER  
PRGN - 2074 - HGN - DR - CH - 0002A

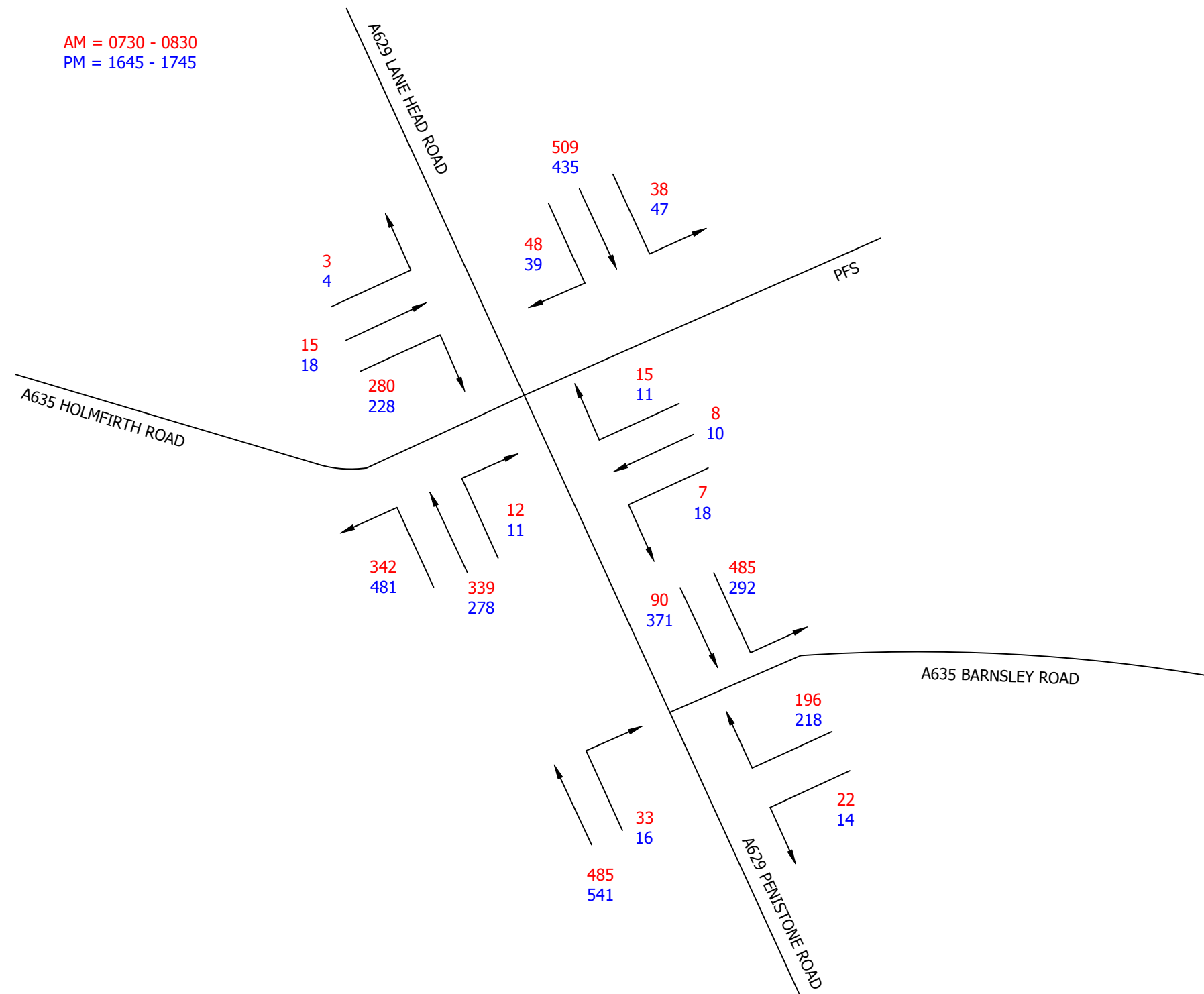
CLIENT  
SILKSTONE ENVIRONMENTAL

SCALE SIZE DRAWN CHECKED AUTHORISED DATE  
NTS A3 JH LJO JH MAY 24

PARAGON HIGHWAYS  
PEACH HOUSE WEST, THE WALLED GARDEN  
NOSTELL ESTATE YARD  
WAKEFIELD WF4 1AB

01924 291536  
MAIL@PARAGONHIGHWAYS.COM

COPYRIGHT © 2024 PAUL HOWARTH HIGHWAY CONSULTANTS LTD T/A PARAGON HIGHWAYS



PROJECT TITLE  
BROMLEY FARM, UPPER CUMBERWORTH

DRAWING TITLE  
PEAK HOUR FLOWS - 2024 + DEVELOPMENT  
A629 LANE HEAD ROAD/ A629 PENISTONE ROAD/  
A635 HOLMFIRTH ROAD/ A635 BARNSELEY ROAD

| ORIGINATOR | PROJECT | VOL.  | TYPE | ROLE | NUMBER  |
|------------|---------|-------|------|------|---------|
| PRGN       | - 2074  | - HGN | - DR | - CH | - 0003A |

CLIENT  
SILKSTONE ENVIRONMENTAL

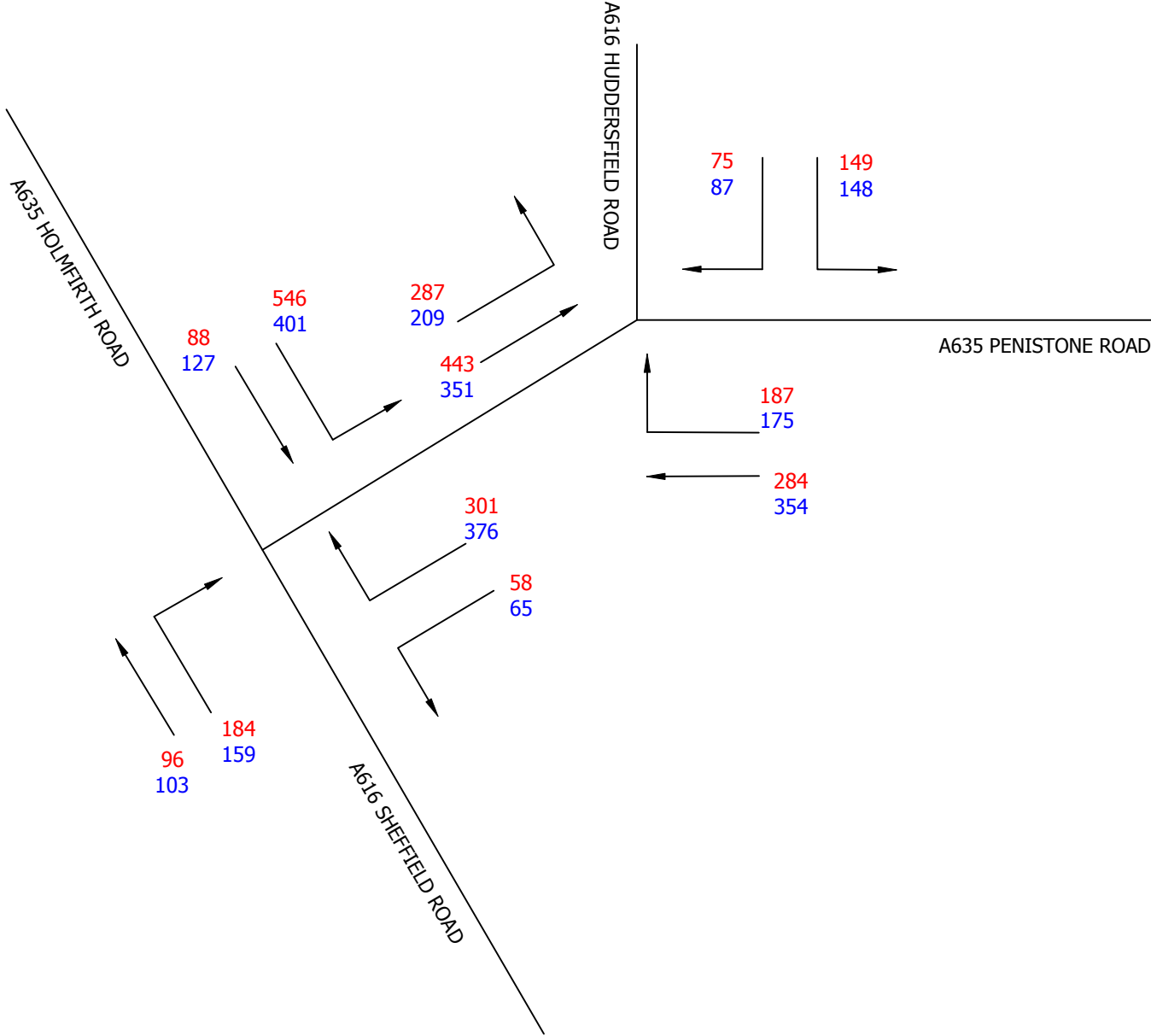
| SCALE | SIZE | DRAWN | CHECKED | AUTHORISED | DATE   |
|-------|------|-------|---------|------------|--------|
| NTS   | A3   | JJH   | LJO     | JJH        | MAY 24 |

PARAGON HIGHWAYS  
PEACH HOUSE WEST, THE WALLED GARDEN  
NOSTELL ESTATE YARD  
WAKEFIELD WF4 1AB

01924 291536  
MAIL@PARAGONHIGHWAYS.COM

COPYRIGHT © 2024 PAUL HOWARTH HIGHWAY CONSULTANTS LTD T/A PARAGON HIGHWAYS

AM = 0730 - 0830  
PM = 1645 - 1745



PROJECT TITLE  
BROMLEY FARM, UPPER CUMBERWORTH

DRAWING TITLE  
PEAK HOUR FLOWS  
A635 PENISTONE ROAD/ A616 HUDDERSFIELD ROAD/  
A635 HOLMFIRTH ROAD/ A616 SHEFFIELD ROAD

| ORIGINATOR | PROJECT | VOL. | TYPE | ROLE | NUMBER |
|------------|---------|------|------|------|--------|
| PRGN       | 2074    | HGN  | DR   | CH   | 0004   |

CLIENT  
SILKSTONE ENVIRONMENTAL

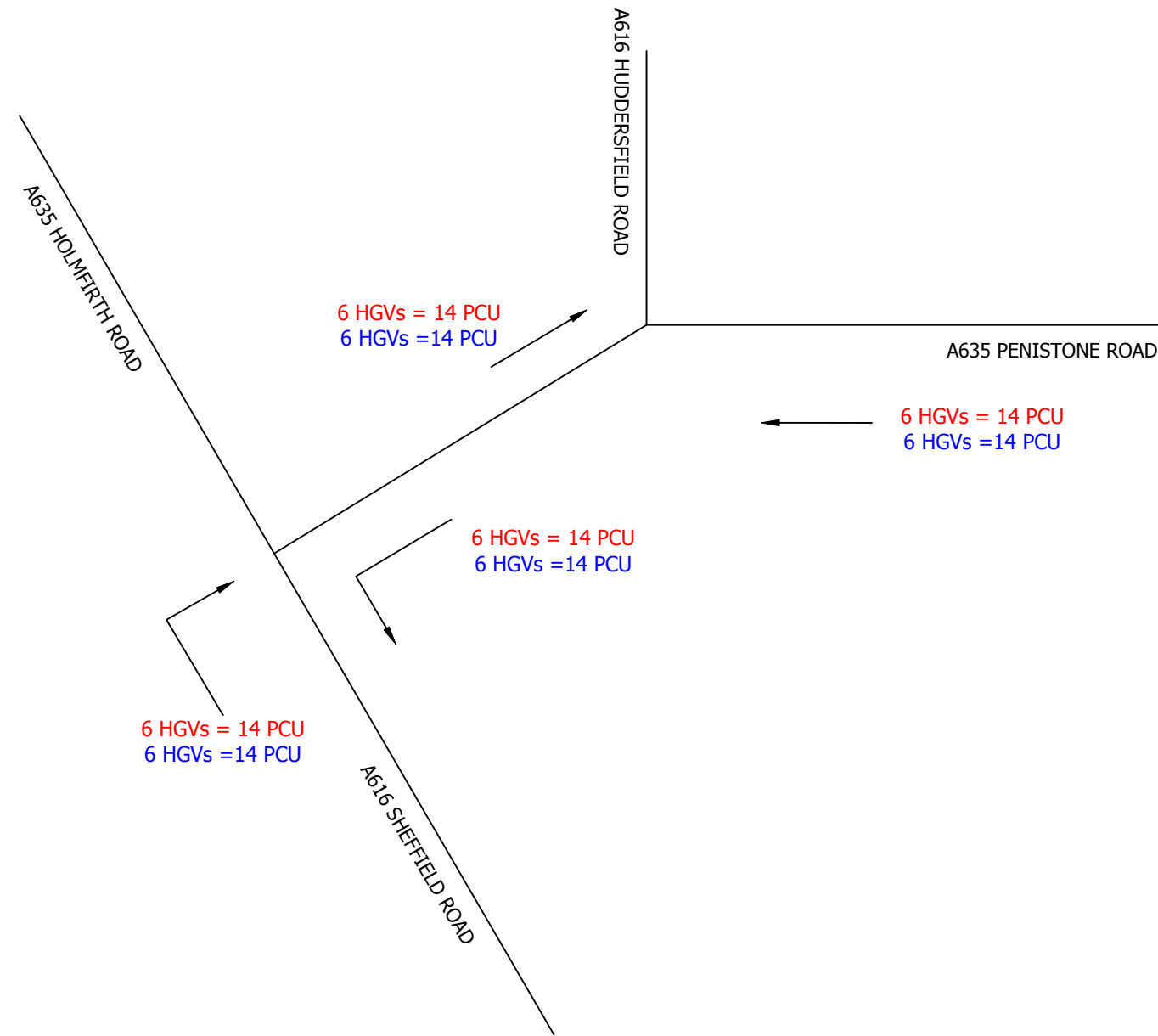
| SCALE | SIZE | DRAWN | CHECKED | AUTHORISED | DATE   |
|-------|------|-------|---------|------------|--------|
| NTS   | A3   | JJH   | LJO     | JJH        | JAN 25 |

PARAGON HIGHWAYS  
PEACH HOUSE WEST, THE WALLED GARDEN  
NOSTELL ESTATE YARD  
WAKEFIELD WF4 1AB

01924 291536  
MAIL@PARAGONHIGHWAYS.COM

COPYRIGHT © 2024 PAUL HOWARTH HIGHWAY CONSULTANTS LTD T/A PARAGON HIGHWAYS

AM = 0730 - 0830  
PM = 1645 - 1745



PROJECT TITLE  
BROMLEY FARM, UPPER CUMBERWORTH

DRAWING TITLE  
PEAK HOUR FLOWS – DEVELOPMENT TRAFFIC  
A635 PENISTONE ROAD/ A616 HUDDERSFIELD ROAD/  
A635 HOLMFIRTH ROAD/ A616 SHEFFIELD ROAD

| DRAWING NUMBER |         |       |      |      |        |  |
|----------------|---------|-------|------|------|--------|--|
| ORIGINATOR     | PROJECT | VOL.  | TYPE | ROLE | NUMBER |  |
| PRGN           | - 2074  | - HGN | - DR | - CH | - 0005 |  |

CLIENT  
SILKSTONE ENVIRONMENTAL

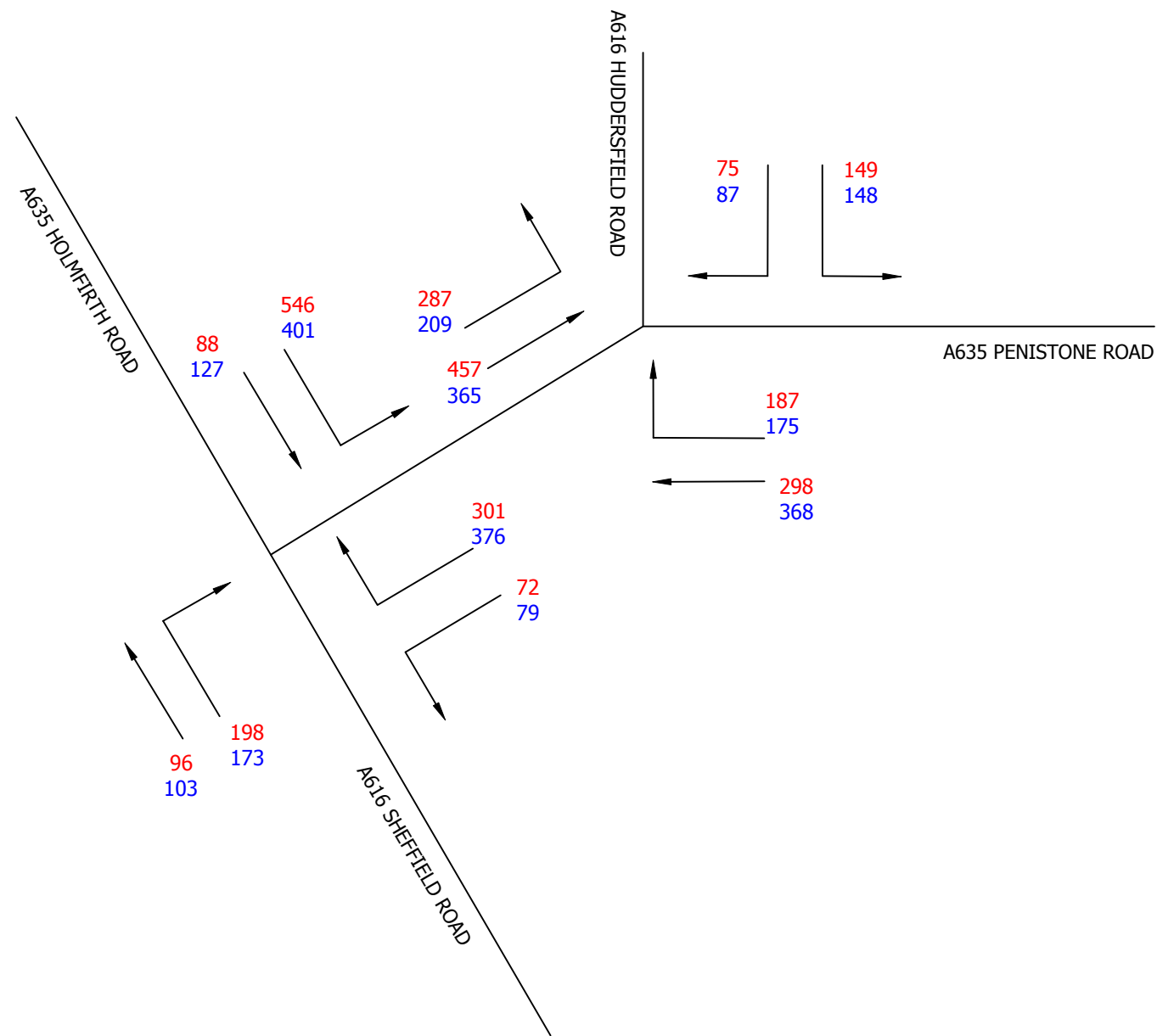
| SCALE | SIZE | DRAWN | CHECKED | AUTHORISED | DATE   |
|-------|------|-------|---------|------------|--------|
| NTS   | A3   | JJH   | LJO     | JJH        | JAN 25 |

PARAGON HIGHWAYS  
PEACH HOUSE WEST, THE WALLED GARDEN  
NOSTELL ESTATE YARD  
WAKEFIELD WF4 1AB

01924 291536  
MAIL@PARAGONHIGHWAYS.COM

COPYRIGHT © 2024 PAUL HOWARTH HIGHWAY CONSULTANTS LTD T/A PARAGON HIGHWAYS

AM = 0730 - 0830  
PM = 1645 - 1745



PROJECT TITLE  
BROMLEY FARM, UPPER CUMBERWORTH

DRAWING TITLE  
PEAK HOUR FLOWS - 2024 + DEVELOPMENT TRAFFIC  
A635 PENISTONE ROAD/ A616 HUDDERSFIELD ROAD/  
A635 HOLMFIRTH ROAD/ A616 SHEFFIELD ROAD

| ORIGINATOR | PROJECT | VOL. | TYPE | ROLE | NUMBER |
|------------|---------|------|------|------|--------|
| PRGN       | 2074    | HGN  | DR   | CH   | 0006   |

CLIENT  
SILKSTONE ENVIRONMENTAL

| SCALE | SIZE | DRAWN | CHECKED | AUTHORISED | DATE   |
|-------|------|-------|---------|------------|--------|
| NTS   | A3   | JJH   | LJO     | JJH        | JAN 25 |

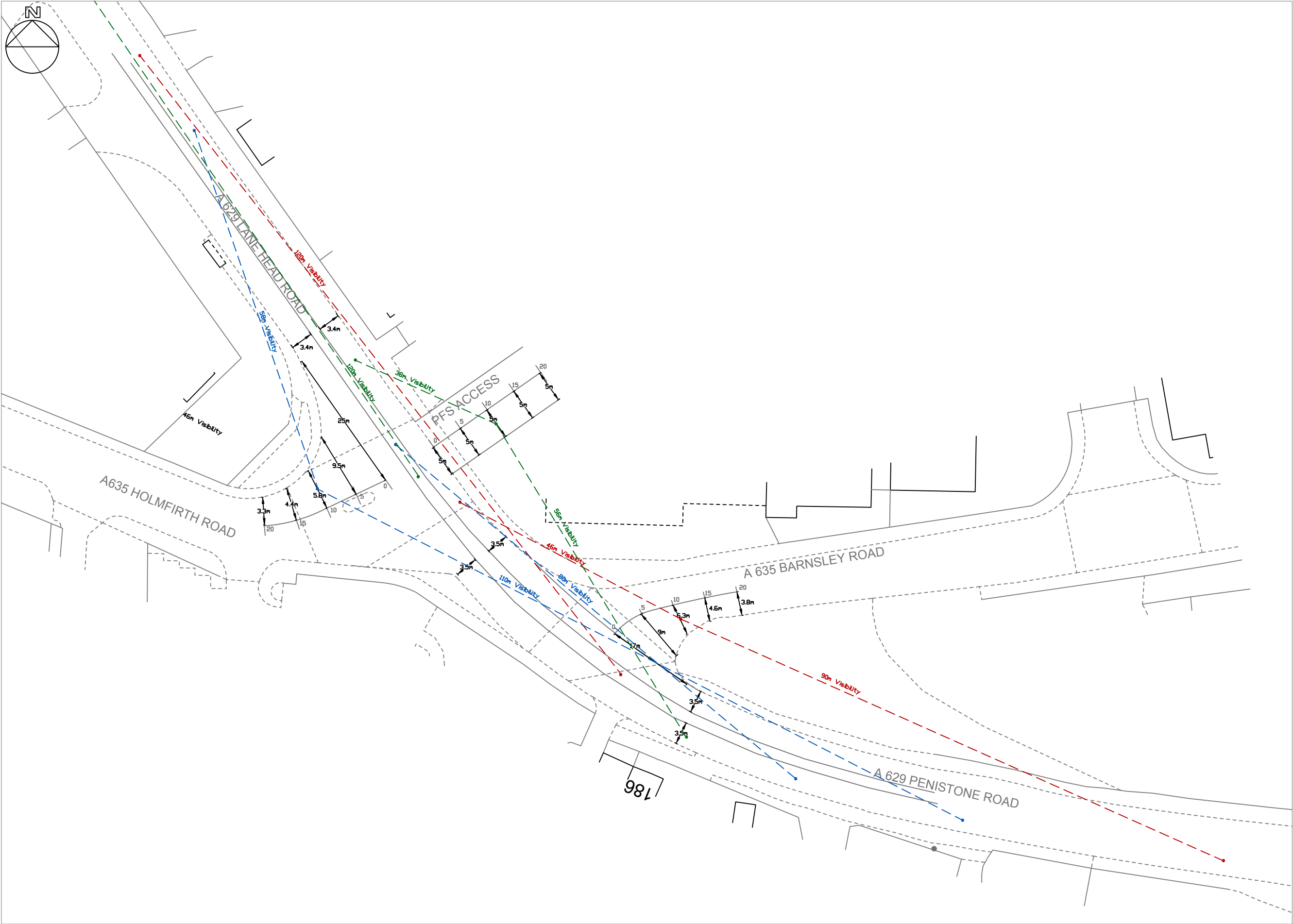
PARAGON HIGHWAYS  
PEACH HOUSE WEST, THE WALLED GARDEN  
NOSTELL ESTATE YARD  
WAKEFIELD WF4 1AB

01924 291536  
MAIL@PARAGONHIGHWAYS.COM

COPYRIGHT © 2024 PAUL HOWARTH HIGHWAY CONSULTANTS LTD T/A PARAGON HIGHWAYS

# Appendix D

## Junction Geometry



PROJECT TITLE  
BROMLEY FARM QUARRY, UPPER CUMBERWORTH

DRAWING TITLE  
A635/ A629 JUNCTION GEOMETRY (PICADY)

| DRAWING NUMBER | PROJECT | VOL.  | TYPE | ROLE | NUMBER |
|----------------|---------|-------|------|------|--------|
| PRGN -         | 2074 -  | HGN - | DR - | CH - | 0101   |

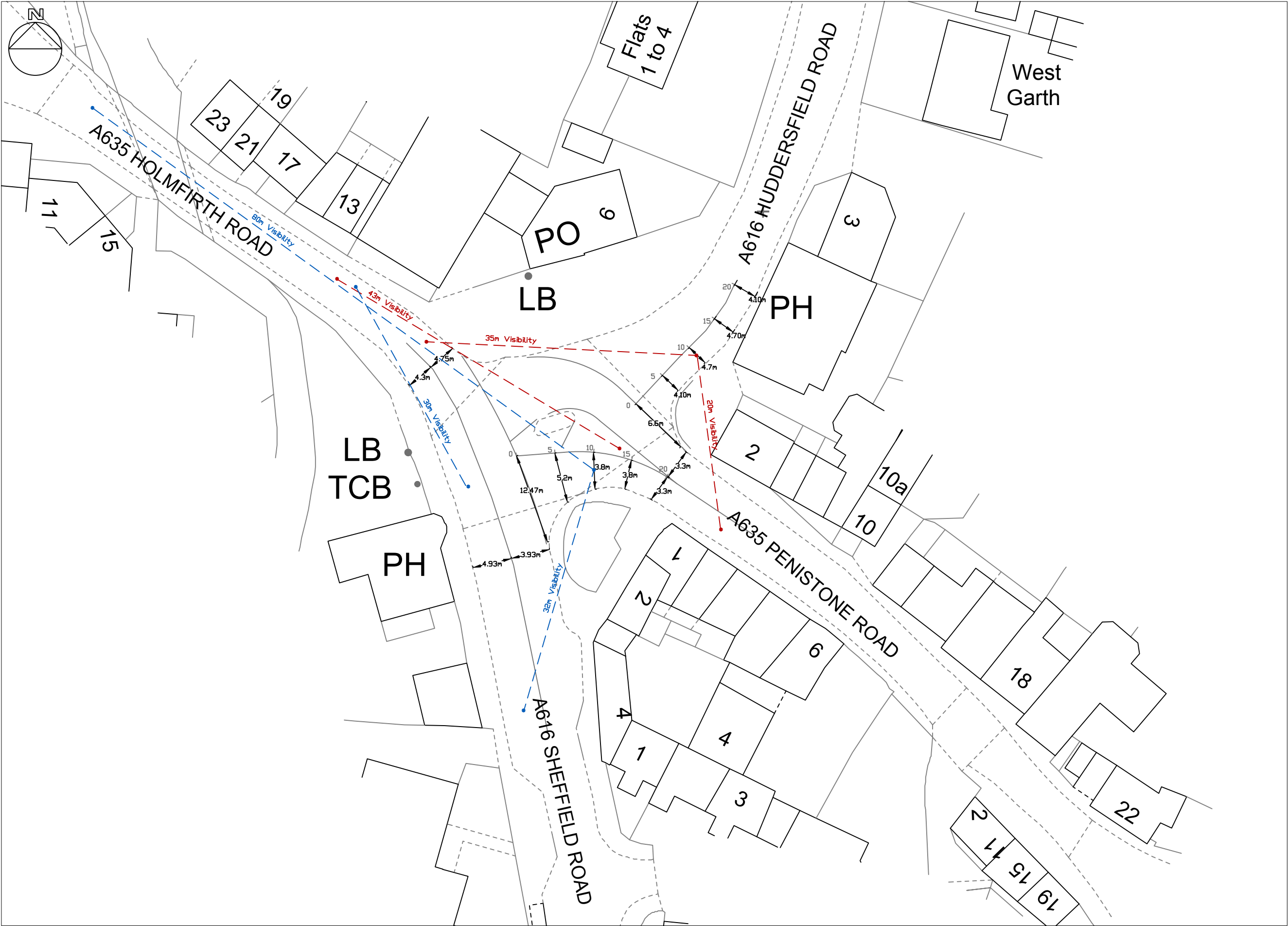
CLIENT  
SILKSTONE ENVIRONMENTAL

| SCALE | SIZE | DRAWN | CHECKED | AUTHORISED | DATE   |
|-------|------|-------|---------|------------|--------|
| NTS   | A3   | JH    | LJO     | AH         | NOV 24 |

PARAGON HIGHWAYS  
PEACH HOUSE WEST, THE WALLED GARDEN  
NOSTELL ESTATE YARD  
WAKEFIELD WF4 1AB

01924 291536  
MAIL@PARAGONHIGHWAYS.COM

COPYRIGHT © 2024 PAUL HOWARTH HIGHWAY CONSULTANTS LTD T/A PARAGON HIGHWAYS



PROJECT TITLE  
BROMLEY FARM QUARRY, UPPER CUMBERWORTH

DRAWING TITLE  
A635/ A616 JUNCTION GEOMETRY (PICADY)

| DRAWING NUMBER | PROJECT | VOL.  | TYPE | ROLE | NUMBER |
|----------------|---------|-------|------|------|--------|
| PRGN -         | 2074 -  | HGN - | DR - | CH - | 0101   |

CLIENT  
SILKSTONE ENVIRONMENTAL

| SCALE | SIZE | DRAWN | CHECKED | AUTHORISED | DATE   |
|-------|------|-------|---------|------------|--------|
| NTS   | A3   | JJH   | LJO     | AH         | DEC 24 |

PARAGON HIGHWAYS  
PEACH HOUSE WEST, THE WALLED GARDEN  
NOSTELL ESTATE YARD  
WAKEFIELD WF4 1AB

01924 291536  
MAIL@PARAGONHIGHWAYS.COM

COPYRIGHT © 2024 PAUL HOWARTH HIGHWAY CONSULTANTS LTD T/A PARAGON HIGHWAYS

# Appendix E

## PICADY Output – A629/ A635

| Junctions 10                                                                                                                                                     |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| PICADY 10 - Priority Intersection Module                                                                                                                         |  |  |  |  |  |  |  |  |  |
| Version: 10.1.1.1905                                                                                                                                             |  |  |  |  |  |  |  |  |  |
| © Copyright TRL Software Limited, 2023                                                                                                                           |  |  |  |  |  |  |  |  |  |
| For sales and distribution information, program advice and maintenance, contact TRL Software:<br>+44 (0)1344 379777 software@trl.co.uk trlsoftware.com           |  |  |  |  |  |  |  |  |  |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |  |  |  |  |  |  |  |  |

Filename: Import of 2024 Base.j10  
Path: C:\Users\leighogden\Documents  
Report generation date: 12/14/2024 9:10:51 AM

»2024 Base, AM  
»2024 Base, PM

### Summary of junction performance

|                           | AM     |             |           |      |     | PM     |             |           |      |     |
|---------------------------|--------|-------------|-----------|------|-----|--------|-------------|-----------|------|-----|
|                           | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS |
| 2024 Base                 |        |             |           |      |     |        |             |           |      |     |
| Junction 1 - Stream B-CD  | D1     | 0.2         | 44.85     | 0.17 | E   | D2     | 0.1         | 20.11     | 0.09 | C   |
| Junction 1 - Stream B-AD  |        | 4.2         | 55.33     | 0.82 | F   |        | 1.8         | 28.40     | 0.63 | D   |
| Junction 1 - Stream A-BCD |        | 0.1         | 4.58      | 0.05 | A   |        | 0.1         | 4.32      | 0.04 | A   |
| Junction 1 - Stream D-ABC |        | 0.1         | 12.03     | 0.09 | B   |        | 0.1         | 10.03     | 0.10 | B   |
| Junction 1 - Stream C-B   |        | 0.1         | 9.82      | 0.12 | A   |        | 0.1         | 10.07     | 0.10 | B   |
| Junction 2 - Stream B-C   |        | 0.1         | 9.76      | 0.06 | A   |        | 0.1         | 13.75     | 0.05 | B   |
| Junction 2 - Stream B-A   |        | 1.0         | 18.34     | 0.48 | C   |        | 1.8         | 30.17     | 0.63 | D   |
| Junction 2 - Stream C-AB  |        | 0.1         | 8.32      | 0.07 | A   |        | 0.0         | 8.41      | 0.04 | A   |

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

### File summary

#### File Description

|             |                                        |
|-------------|----------------------------------------|
| Title       | Bromley Farm Quarry, Upper Cumberworth |
| Location    | A629/ A635 Sovereign Crossroads        |
| Site number | 2074                                   |
| Date        | 11/19/2024                             |
| Version     | 2                                      |
| Status      |                                        |
| Identifier  |                                        |
| Client      | SE                                     |
| Jobnumber   | 2074C                                  |
| Enumerator  | AH                                     |
| Description | 2024 Base                              |

### Units

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

## Analysis Options

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

## Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2024 Base     | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D2 | 2024 Base     | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

## Analysis Set Details

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

# 2024 Base, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Arm D Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | Crossroads    | Two-way         | Two-way         | Two-way         | Two-way         |                       | 10.42              | B            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                 |                       | 2.98               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 7.10              | A           |

## Arms

### Arms

| Junction | Arm | Name                | Description                        | Arm type |
|----------|-----|---------------------|------------------------------------|----------|
| 1        | A   | A629 Lane Head Road | South of Holmfirth Road A635 Junct | Major    |
|          | B   | A635 Holmfirth Road |                                    | Minor    |
|          | C   | A629 Lane Head Road | North of Holmfirth Road A635 Junct | Major    |
|          | D   | PFS Access          | Opposite Holmfirth Road A635 Junct | Minor    |
| 2        | A   | A629 Lane Head Road | North of Barnsley Road A635 Junct  | Major    |
|          | B   | A635 Barnsley Road  |                                    | Minor    |
|          | C   | A629 Penistone Road |                                    | Major    |

### Major Arm Geometry

| Junction | Arm | Width of carriageway (m) | Has kerbed central reserve | Has right-turn storage | Width for right-turn storage (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|----------|-----|--------------------------|----------------------------|------------------------|----------------------------------|-------------------------------|---------|----------------------|
| 1        | A   | 6.90                     |                            |                        |                                  | 120.0                         | ✓       | 0.00                 |
|          | C   | 6.90                     |                            | ✓                      | 2.40                             | 80.0                          |         | -                    |
| 2        | C   | 7.00                     |                            | ✓                      | 2.50                             | 120.0                         | ✓       | 9.00                 |

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

### Minor Arm Geometry

| Junction | Arm | Minor arm type      | Lane width (m) | 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) |
|----------|-----|---------------------|----------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| 1        | B   | One lane plus flare |                | 10.00                 | 9.50            | 5.80             | 4.40             | 3.30             |                       | 1.00               | 50                     | 131                     |
|          | D   | One lane            | 5.00           |                       |                 |                  |                  |                  |                       |                    | 58                     | 36                      |
| 2        | B   | One lane plus flare |                | 10.00                 | 9.00            | 6.30             | 4.60             | 3.80             |                       | 1.00               | 73                     | 33                      |

## 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                | 643                | -             | -             | -             | -             | -             | -             | 0.240         | 0.342         | 0.240         | -             | -             | -             |
|          | B-A                | 642                | 0.112         | 0.284         | 0.284         | -             | -             | -             | 0.179         | 0.406         | -             | 0.284         | 0.284         | 0.142         |
|          | B-C                | 681                | 0.100         | 0.254         | -             | -             | -             | -             | -             | -             | -             | -             | -             | -             |
|          | B-D, nearside lane | 539                | 0.094         | 0.238         | 0.238         | -             | -             | -             | 0.150         | 0.341         | 0.150         | -             | -             | -             |
|          | B-D, offside lane  | 642                | 0.112         | 0.284         | 0.284         | -             | -             | -             | 0.179         | 0.406         | 0.179         | -             | -             | -             |
|          | C-B                | 634                | 0.236         | 0.236         | 0.337         | -             | -             | -             | -             | -             | -             | -             | -             | -             |
|          | D-A                | 776                | -             | -             | -             | -             | -             | -             | 0.289         | -             | 0.114         | -             | -             | -             |
|          | D-B, nearside lane | 616                | 0.172         | 0.172         | 0.389         | -             | -             | -             | 0.273         | 0.273         | 0.108         | -             | -             | -             |
|          | D-B, offside lane  | 616                | 0.172         | 0.172         | 0.389         | -             | -             | -             | 0.273         | 0.273         | 0.108         | -             | -             | -             |
|          | D-C                | 616                | -             | 0.172         | 0.389         | 0.136         | 0.273         | 0.273         | 0.273         | 0.273         | 0.108         | -             | -             | -             |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 2        | B-A    | 599                | 0.104         | 0.264         | 0.166         | 0.377         |
|          | B-C    | 625                | 0.092         | 0.232         | -             | -             |
|          | C-B    | 664                | 0.246         | 0.246         | -             | -             |

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

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

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2024 Base     | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 679                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 284                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 595                     | 100.000            |
|          | D   |            | ONE HOUR     | ✓            | 30                      | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 561                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 204                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 518                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      |   | To  |     |     |    |
|------|---|-----|-----|-----|----|
|      |   | A   | B   | C   | D  |
| From | A | 0   | 328 | 339 | 12 |
|      | B | 286 | 0   | 3   | 15 |
|      | C | 509 | 48  | 0   | 38 |
|      | D | 7   | 8   | 15  | 0  |

### Demand (PCU/hr)

#### Junction 2

|      | To |     |     |    |
|------|----|-----|-----|----|
|      |    | A   | B   | C  |
| From | A  | 0   | 471 | 90 |
|      | B  | 182 | 0   | 22 |
|      | C  | 485 | 33  | 0  |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|      | To |    |    |    |    |
|------|----|----|----|----|----|
|      |    | A  | B  | C  | D  |
| From | A  | 10 | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 | 10 |
|      | D  | 10 | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|      | To |    |    |    |
|------|----|----|----|----|
| From |    | A  | B  | C  |
|      | A  | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-CD   | 0.17    | 44.85         | 0.2             | E       | 14                      | 21                            |
|          | B-AD   | 0.82    | 55.33         | 4.2             | F       | 246                     | 370                           |
|          | A-BCD  | 0.05    | 4.58          | 0.1             | A       | 33                      | 49                            |
|          | A-B    |         |               |                 |         | 290                     | 435                           |
|          | A-C    |         |               |                 |         | 300                     | 450                           |
|          | D-ABC  | 0.09    | 12.03         | 0.1             | B       | 28                      | 41                            |
|          | C-D    |         |               |                 |         | 35                      | 52                            |
|          | C-A    |         |               |                 |         | 467                     | 701                           |
| 2        | C-B    | 0.12    | 9.82          | 0.1             | A       | 44                      | 66                            |
|          | B-C    | 0.06    | 9.76          | 0.1             | A       | 20                      | 30                            |
|          | B-A    | 0.48    | 18.34         | 1.0             | C       | 167                     | 251                           |
|          | C-AB   | 0.07    | 8.32          | 0.1             | A       | 30                      | 45                            |
|          | C-A    |         |               |                 |         | 445                     | 668                           |
|          | A-B    |         |               |                 |         | 432                     | 648                           |
|          | A-C    |         |               |                 |         | 83                      | 124                           |

## Main Results for each time segment

### 07:15 - 07:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 10                    | 3                       | 330               | 0.032 | 10                  | 0.0               | 0.0             | 12.368    | B                             |
|          | B-AD   | 203                   | 51                      | 451               | 0.451 | 200                 | 0.0               | 0.9             | 15.568    | C                             |
|          | A-BCD  | 21                    | 5                       | 886               | 0.024 | 21                  | 0.0               | 0.0             | 4.576     | A                             |
|          | A-B    | 241                   | 60                      |                   |       | 241                 |                   |                 |           |                               |
|          | A-C    | 249                   | 62                      |                   |       | 249                 |                   |                 |           |                               |
|          | D-ABC  | 23                    | 6                       | 456               | 0.050 | 22                  | 0.0               | 0.1             | 9.128     | A                             |
|          | C-D    | 29                    | 7                       |                   |       | 29                  |                   |                 |           |                               |
|          | C-A    | 383                   | 96                      |                   |       | 383                 |                   |                 |           |                               |
| 2        | C-B    | 36                    | 9                       | 512               | 0.071 | 36                  | 0.0               | 0.1             | 8.305     | A                             |
|          | B-C    | 17                    | 4                       | 522               | 0.032 | 16                  | 0.0               | 0.0             | 7.831     | A                             |
|          | B-A    | 137                   | 34                      | 474               | 0.289 | 135                 | 0.0               | 0.4             | 11.621    | B                             |
|          | C-AB   | 25                    | 6                       | 560               | 0.044 | 25                  | 0.0               | 0.1             | 7.389     | A                             |
|          | C-A    | 365                   | 91                      |                   |       | 365                 |                   |                 |           |                               |
|          | A-B    | 355                   | 89                      |                   |       | 355                 |                   |                 |           |                               |
|          | A-C    | 68                    | 17                      |                   |       | 68                  |                   |                 |           |                               |

### 07:30 - 07:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 13                    | 3                       | 255               | 0.053 | 13                  | 0.0               | 0.1             | 16.374    | C                             |
|          | B-AD   | 242                   | 60                      | 413               | 0.585 | 240                 | 0.9               | 1.5             | 22.456    | C                             |
|          | A-BCD  | 30                    | 7                       | 940               | 0.032 | 30                  | 0.0               | 0.0             | 4.349     | A                             |
|          | A-B    | 285                   | 71                      |                   |       | 285                 |                   |                 |           |                               |
|          | A-C    | 295                   | 74                      |                   |       | 295                 |                   |                 |           |                               |
|          | D-ABC  | 27                    | 7                       | 417               | 0.065 | 27                  | 0.1               | 0.1             | 10.143    | B                             |
|          | C-D    | 34                    | 9                       |                   |       | 34                  |                   |                 |           |                               |
|          | C-A    | 458                   | 114                     |                   |       | 458                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 489               | 0.088 | 43                  | 0.1               | 0.1             | 8.885     | A                             |
|          | B-C    | 20                    | 5                       | 490               | 0.040 | 20                  | 0.0               | 0.0             | 8.428     | A                             |
|          | B-A    | 164                   | 41                      | 450               | 0.364 | 163                 | 0.4               | 0.6             | 13.763    | B                             |
|          | C-AB   | 30                    | 7                       | 540               | 0.055 | 30                  | 0.1               | 0.1             | 7.753     | A                             |
|          | C-A    | 436                   | 109                     |                   |       | 436                 |                   |                 |           |                               |
|          | A-B    | 423                   | 106                     |                   |       | 423                 |                   |                 |           |                               |
|          | A-C    | 81                    | 20                      |                   |       | 81                  |                   |                 |           |                               |

### 07:45 - 08:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 18                    | 5                       | 121               | 0.152 | 18                  | 0.1               | 0.2             | 38.387    | E                             |
|          | B-AD   | 294                   | 74                      | 361               | 0.815 | 285                 | 1.5               | 3.8             | 47.189    | E                             |
|          | A-BCD  | 47                    | 12                      | 1019              | 0.047 | 47                  | 0.0               | 0.1             | 4.074     | A                             |
|          | A-B    | 344                   | 86                      |                   |       | 344                 |                   |                 |           |                               |
|          | A-C    | 356                   | 89                      |                   |       | 356                 |                   |                 |           |                               |
|          | D-ABC  | 33                    | 8                       | 363               | 0.091 | 33                  | 0.1               | 0.1             | 11.983    | B                             |
|          | C-D    | 42                    | 10                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 560                   | 140                     |                   |       | 560                 |                   |                 |           |                               |
| 2        | C-B    | 53                    | 13                      | 456               | 0.116 | 53                  | 0.1               | 0.1             | 9.816     | A                             |
|          | B-C    | 24                    | 6                       | 431               | 0.056 | 24                  | 0.0               | 0.1             | 9.722     | A                             |
|          | B-A    | 200                   | 50                      | 416               | 0.482 | 199                 | 0.6               | 1.0             | 18.108    | C                             |
|          | C-AB   | 36                    | 9                       | 512               | 0.071 | 36                  | 0.1               | 0.1             | 8.316     | A                             |
|          | C-A    | 534                   | 133                     |                   |       | 534                 |                   |                 |           |                               |
|          | A-B    | 519                   | 130                     |                   |       | 519                 |                   |                 |           |                               |
|          | A-C    | 99                    | 25                      |                   |       | 99                  |                   |                 |           |                               |

## 08:00 - 08:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 19                    | 5                       | 107               | 0.174 | 18                  | 0.2               | 0.2             | 44.845    | E                             |
|          | B-AD   | 294                   | 74                      | 361               | 0.816 | 292                 | 3.8               | 4.2             | 55.329    | F                             |
|          | A-BCD  | 48                    | 12                      | 1019              | 0.047 | 48                  | 0.1               | 0.1             | 4.075     | A                             |
|          | A-B    | 344                   | 88                      |                   |       | 344                 |                   |                 |           |                               |
|          | A-C    | 356                   | 89                      |                   |       | 356                 |                   |                 |           |                               |
|          | D-ABC  | 33                    | 8                       | 362               | 0.091 | 33                  | 0.1               | 0.1             | 12.026    | B                             |
|          | C-D    | 42                    | 10                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 560                   | 140                     |                   |       | 560                 |                   |                 |           |                               |
| 2        | C-B    | 53                    | 13                      | 456               | 0.116 | 53                  | 0.1               | 0.1             | 9.822     | A                             |
|          | B-C    | 24                    | 6                       | 430               | 0.056 | 24                  | 0.1               | 0.1             | 9.764     | A                             |
|          | B-A    | 200                   | 50                      | 416               | 0.482 | 200                 | 1.0               | 1.0             | 18.342    | C                             |
|          | C-AB   | 36                    | 9                       | 512               | 0.071 | 36                  | 0.1               | 0.1             | 8.318     | A                             |
|          | C-A    | 534                   | 133                     |                   |       | 534                 |                   |                 |           |                               |
|          | A-B    | 519                   | 130                     |                   |       | 519                 |                   |                 |           |                               |
|          | A-C    | 99                    | 25                      |                   |       | 99                  |                   |                 |           |                               |

## 08:15 - 08:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 14                    | 3                       | 241               | 0.056 | 14                  | 0.2               | 0.1             | 17.482    | C                             |
|          | B-AD   | 242                   | 60                      | 413               | 0.585 | 252                 | 4.2               | 1.6             | 25.928    | D                             |
|          | A-BCD  | 30                    | 7                       | 940               | 0.032 | 30                  | 0.1               | 0.0             | 4.350     | A                             |
|          | A-B    | 285                   | 71                      |                   |       | 285                 |                   |                 |           |                               |
|          | A-C    | 295                   | 74                      |                   |       | 295                 |                   |                 |           |                               |
|          | D-ABC  | 27                    | 7                       | 416               | 0.065 | 27                  | 0.1               | 0.1             | 10.187    | B                             |
|          | C-D    | 34                    | 9                       |                   |       | 34                  |                   |                 |           |                               |
|          | C-A    | 458                   | 114                     |                   |       | 458                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 489               | 0.088 | 43                  | 0.1               | 0.1             | 8.895     | A                             |
|          | B-C    | 20                    | 5                       | 488               | 0.041 | 20                  | 0.1               | 0.0             | 8.465     | A                             |
|          | B-A    | 164                   | 41                      | 450               | 0.364 | 165                 | 1.0               | 0.6             | 13.972    | B                             |
|          | C-AB   | 30                    | 7                       | 540               | 0.055 | 30                  | 0.1               | 0.1             | 7.757     | A                             |
|          | C-A    | 436                   | 109                     |                   |       | 436                 |                   |                 |           |                               |
|          | A-B    | 423                   | 106                     |                   |       | 423                 |                   |                 |           |                               |
|          | A-C    | 81                    | 20                      |                   |       | 81                  |                   |                 |           |                               |

## 08:30 - 08:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 10                    | 3                       | 325               | 0.032 | 11                  | 0.1               | 0.0             | 12.593    | B                             |
|          | B-AD   | 203                   | 51                      | 451               | 0.451 | 206                 | 1.6               | 0.9             | 16.374    | C                             |
|          | A-BCD  | 21                    | 5                       | 886               | 0.024 | 21                  | 0.0               | 0.0             | 4.578     | A                             |
|          | A-B    | 241                   | 60                      |                   |       | 241                 |                   |                 |           |                               |
|          | A-C    | 249                   | 62                      |                   |       | 249                 |                   |                 |           |                               |
|          | D-ABC  | 23                    | 6                       | 455               | 0.050 | 23                  | 0.1               | 0.1             | 9.155     | A                             |
|          | C-D    | 29                    | 7                       |                   |       | 29                  |                   |                 |           |                               |
|          | C-A    | 383                   | 96                      |                   |       | 383                 |                   |                 |           |                               |
| 2        | C-B    | 36                    | 9                       | 512               | 0.071 | 36                  | 0.1               | 0.1             | 8.322     | A                             |
|          | B-C    | 17                    | 4                       | 520               | 0.032 | 17                  | 0.0               | 0.0             | 7.859     | A                             |
|          | B-A    | 137                   | 34                      | 474               | 0.289 | 138                 | 0.6               | 0.5             | 11.796    | B                             |
|          | C-AB   | 25                    | 6                       | 560               | 0.044 | 25                  | 0.1               | 0.1             | 7.396     | A                             |
|          | C-A    | 365                   | 91                      |                   |       | 365                 |                   |                 |           |                               |
|          | A-B    | 355                   | 89                      |                   |       | 355                 |                   |                 |           |                               |
|          | A-C    | 68                    | 17                      |                   |       | 68                  |                   |                 |           |                               |

# 2024 Base, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Arm D Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | Crossroads    | Two-way         | Two-way         | Two-way         | Two-way         |                       | 4.83               | A            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                 |                       | 4.55               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 4.70              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2024 Base     | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 756                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 236                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 521                     | 100.000            |
|          | D   |            | ONE HOUR     | ✓            | 39                      | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 649                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 218                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 557                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

Junction 1

|      |   | To  |     |     |    |
|------|---|-----|-----|-----|----|
|      |   | A   | B   | C   | D  |
| From | A | 0   | 467 | 278 | 11 |
|      | B | 214 | 0   | 4   | 18 |
|      | C | 435 | 39  | 0   | 47 |
|      | D | 18  | 10  | 11  | 0  |

### Demand (PCU/hr)

Junction 2

|      |   | To  |     |     |
|------|---|-----|-----|-----|
|      |   | A   | B   | C   |
| From | A | 0   | 278 | 371 |
|      | B | 204 | 0   | 14  |
|      | C | 541 | 16  | 0   |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|      |   | To |    |    |    |
|------|---|----|----|----|----|
|      |   | A  | B  | C  | D  |
| From | A | 10 | 10 | 10 | 10 |
|      | B | 10 | 10 | 10 | 10 |
|      | C | 10 | 10 | 10 | 10 |
|      | D | 10 | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|      |   | To |    |    |
|------|---|----|----|----|
|      |   | A  | B  | C  |
| From | A | 10 | 10 | 10 |
|      | B | 10 | 10 | 10 |
|      | C | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-CD   | 0.09    | 20.11         | 0.1             | C       | 16                      | 24                            |
|          | B-AD   | 0.63    | 28.40         | 1.8             | D       | 200                     | 301                           |
|          | A-BCD  | 0.04    | 4.32          | 0.1             | A       | 33                      | 50                            |
|          | A-B    |         |               |                 |         | 414                     | 621                           |
|          | A-C    |         |               |                 |         | 247                     | 370                           |
|          | D-ABC  | 0.10    | 10.03         | 0.1             | B       | 36                      | 54                            |
|          | C-D    |         |               |                 |         | 43                      | 65                            |
|          | C-A    |         |               |                 |         | 399                     | 599                           |
| 2        | C-B    | 0.10    | 10.07         | 0.1             | B       | 36                      | 54                            |
|          | B-C    | 0.05    | 13.75         | 0.1             | B       | 13                      | 19                            |
|          | B-A    | 0.63    | 30.17         | 1.8             | D       | 187                     | 281                           |
|          | C-AB   | 0.04    | 8.41          | 0.0             | A       | 15                      | 22                            |
|          | C-A    |         |               |                 |         | 496                     | 745                           |
|          | A-B    |         |               |                 |         | 255                     | 383                           |
|          | A-C    |         |               |                 |         | 340                     | 511                           |

## Main Results for each time segment

### 16:30 - 16:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 12                    | 3                       | 371               | 0.033 | 12                  | 0.0               | 0.0             | 11.041    | B                             |
|          | B-AD   | 168                   | 41                      | 462               | 0.358 | 163                 | 0.0               | 0.6             | 13.178    | B                             |
|          | A-BCD  | 21                    | 5                       | 937               | 0.022 | 21                  | 0.0               | 0.0             | 4.320     | A                             |
|          | A-B    | 344                   | 88                      |                   |       | 344                 |                   |                 |           |                               |
|          | A-C    | 205                   | 51                      |                   |       | 205                 |                   |                 |           |                               |
|          | D-ABC  | 29                    | 7                       | 519               | 0.057 | 29                  | 0.0               | 0.1             | 8.072     | A                             |
|          | C-D    | 35                    | 9                       |                   |       | 35                  |                   |                 |           |                               |
|          | C-A    | 327                   | 82                      |                   |       | 327                 |                   |                 |           |                               |
| 2        | C-B    | 29                    | 7                       | 499               | 0.059 | 29                  | 0.0               | 0.1             | 8.429     | A                             |
|          | B-C    | 11                    | 3                       | 468               | 0.023 | 10                  | 0.0               | 0.0             | 8.653     | A                             |
|          | B-A    | 154                   | 38                      | 433               | 0.355 | 151                 | 0.0               | 0.6             | 13.937    | B                             |
|          | C-AB   | 12                    | 3                       | 544               | 0.022 | 12                  | 0.0               | 0.0             | 7.441     | A                             |
|          | C-A    | 407                   | 102                     |                   |       | 407                 |                   |                 |           |                               |
|          | A-B    | 209                   | 52                      |                   |       | 209                 |                   |                 |           |                               |
|          | A-C    | 279                   | 70                      |                   |       | 279                 |                   |                 |           |                               |

### 16:45 - 17:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 15                    | 4                       | 315               | 0.049 | 15                  | 0.0               | 0.1             | 13.227    | B                             |
|          | B-AD   | 197                   | 49                      | 427               | 0.461 | 196                 | 0.6               | 0.9             | 17.034    | C                             |
|          | A-BCD  | 30                    | 7                       | 1001              | 0.030 | 30                  | 0.0               | 0.0             | 4.077     | A                             |
|          | A-B    | 407                   | 102                     |                   |       | 407                 |                   |                 |           |                               |
|          | A-C    | 242                   | 61                      |                   |       | 242                 |                   |                 |           |                               |
|          | D-ABC  | 35                    | 9                       | 486               | 0.072 | 35                  | 0.1               | 0.1             | 8.783     | A                             |
|          | C-D    | 42                    | 11                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 391                   | 98                      |                   |       | 391                 |                   |                 |           |                               |
| 2        | C-B    | 35                    | 9                       | 472               | 0.074 | 35                  | 0.1               | 0.1             | 9.052     | A                             |
|          | B-C    | 13                    | 3                       | 415               | 0.030 | 13                  | 0.0               | 0.0             | 9.847     | A                             |
|          | B-A    | 183                   | 46                      | 400               | 0.458 | 182                 | 0.6               | 0.9             | 18.046    | C                             |
|          | C-AB   | 14                    | 4                       | 521               | 0.028 | 14                  | 0.0               | 0.0             | 7.819     | A                             |
|          | C-A    | 488                   | 122                     |                   |       | 488                 |                   |                 |           |                               |
|          | A-B    | 250                   | 62                      |                   |       | 250                 |                   |                 |           |                               |
|          | A-C    | 334                   | 83                      |                   |       | 334                 |                   |                 |           |                               |

### 17:00 - 17:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 21                    | 5                       | 221               | 0.093 | 20                  | 0.1               | 0.1             | 19.679    | C                             |
|          | B-AD   | 239                   | 60                      | 378               | 0.633 | 236                 | 0.9               | 1.8             | 27.246    | D                             |
|          | A-BCD  | 49                    | 12                      | 1093              | 0.045 | 49                  | 0.0               | 0.1             | 3.789     | A                             |
|          | A-B    | 491                   | 123                     |                   |       | 491                 |                   |                 |           |                               |
|          | A-C    | 292                   | 73                      |                   |       | 292                 |                   |                 |           |                               |
|          | D-ABC  | 43                    | 11                      | 438               | 0.098 | 43                  | 0.1               | 0.1             | 10.017    | B                             |
|          | C-D    | 52                    | 13                      |                   |       | 52                  |                   |                 |           |                               |
|          | C-A    | 479                   | 120                     |                   |       | 479                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 436               | 0.098 | 43                  | 0.1               | 0.1             | 10.065    | B                             |
|          | B-C    | 15                    | 4                       | 309               | 0.050 | 15                  | 0.0               | 0.1             | 13.468    | B                             |
|          | B-A    | 225                   | 56                      | 355               | 0.633 | 221                 | 0.9               | 1.8             | 28.890    | D                             |
|          | C-AB   | 18                    | 4                       | 489               | 0.036 | 18                  | 0.0               | 0.0             | 8.409     | A                             |
|          | C-A    | 596                   | 149                     |                   |       | 596                 |                   |                 |           |                               |
|          | A-B    | 306                   | 77                      |                   |       | 306                 |                   |                 |           |                               |
|          | A-C    | 408                   | 102                     |                   |       | 408                 |                   |                 |           |                               |

**17:15 - 17:30**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 21                    | 5                       | 218               | 0.095 | 21                  | 0.1               | 0.1             | 20.107    | C                             |
|          | B-AD   | 239                   | 60                      | 378               | 0.633 | 239                 | 1.8               | 1.8             | 28.402    | D                             |
|          | A-BCD  | 49                    | 12                      | 1093              | 0.045 | 49                  | 0.1               | 0.1             | 3.793     | A                             |
|          | A-B    | 491                   | 123                     |                   |       | 491                 |                   |                 |           |                               |
|          | A-C    | 292                   | 73                      |                   |       | 292                 |                   |                 |           |                               |
|          | D-ABC  | 43                    | 11                      | 438               | 0.098 | 43                  | 0.1               | 0.1             | 10.029    | B                             |
|          | C-D    | 52                    | 13                      |                   |       | 52                  |                   |                 |           |                               |
|          | C-A    | 479                   | 120                     |                   |       | 479                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 436               | 0.098 | 43                  | 0.1               | 0.1             | 10.071    | B                             |
|          | B-C    | 15                    | 4                       | 303               | 0.051 | 15                  | 0.1               | 0.1             | 13.747    | B                             |
|          | B-A    | 225                   | 56                      | 355               | 0.633 | 224                 | 1.8               | 1.8             | 30.173    | D                             |
|          | C-AB   | 18                    | 4                       | 489               | 0.036 | 18                  | 0.0               | 0.0             | 8.409     | A                             |
|          | C-A    | 596                   | 149                     |                   |       | 596                 |                   |                 |           |                               |
|          | A-B    | 308                   | 77                      |                   |       | 308                 |                   |                 |           |                               |
|          | A-C    | 408                   | 102                     |                   |       | 408                 |                   |                 |           |                               |

**17:30 - 17:45**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 15                    | 4                       | 311               | 0.050 | 16                  | 0.1               | 0.1             | 13.436    | B                             |
|          | B-AD   | 197                   | 49                      | 427               | 0.461 | 200                 | 1.8               | 1.0             | 17.738    | C                             |
|          | A-BCD  | 30                    | 8                       | 1001              | 0.030 | 30                  | 0.1               | 0.0             | 4.078     | A                             |
|          | A-B    | 407                   | 102                     |                   |       | 407                 |                   |                 |           |                               |
|          | A-C    | 242                   | 61                      |                   |       | 242                 |                   |                 |           |                               |
|          | D-ABC  | 35                    | 9                       | 485               | 0.072 | 35                  | 0.1               | 0.1             | 8.797     | A                             |
|          | C-D    | 42                    | 11                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 391                   | 98                      |                   |       | 391                 |                   |                 |           |                               |
| 2        | C-B    | 35                    | 9                       | 472               | 0.074 | 35                  | 0.1               | 0.1             | 9.082     | A                             |
|          | B-C    | 13                    | 3                       | 409               | 0.031 | 13                  | 0.1               | 0.0             | 9.981     | A                             |
|          | B-A    | 183                   | 46                      | 400               | 0.458 | 187                 | 1.8               | 1.0             | 18.831    | C                             |
|          | C-AB   | 14                    | 4                       | 521               | 0.028 | 14                  | 0.0               | 0.0             | 7.820     | A                             |
|          | C-A    | 488                   | 122                     |                   |       | 488                 |                   |                 |           |                               |
|          | A-B    | 250                   | 62                      |                   |       | 250                 |                   |                 |           |                               |
|          | A-C    | 334                   | 83                      |                   |       | 334                 |                   |                 |           |                               |

**17:45 - 18:00**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 12                    | 3                       | 368               | 0.033 | 12                  | 0.1               | 0.0             | 11.136    | B                             |
|          | B-AD   | 165                   | 41                      | 462               | 0.359 | 167                 | 1.0               | 0.6             | 13.501    | B                             |
|          | A-BCD  | 21                    | 5                       | 937               | 0.022 | 21                  | 0.0               | 0.0             | 4.323     | A                             |
|          | A-B    | 344                   | 86                      |                   |       | 344                 |                   |                 |           |                               |
|          | A-C    | 205                   | 51                      |                   |       | 205                 |                   |                 |           |                               |
|          | D-ABC  | 29                    | 7                       | 519               | 0.057 | 29                  | 0.1               | 0.1             | 8.089     | A                             |
|          | C-D    | 35                    | 9                       |                   |       | 35                  |                   |                 |           |                               |
|          | C-A    | 327                   | 82                      |                   |       | 327                 |                   |                 |           |                               |
| 2        | C-B    | 29                    | 7                       | 499               | 0.059 | 29                  | 0.1               | 0.1             | 8.443     | A                             |
|          | B-C    | 11                    | 3                       | 465               | 0.023 | 11                  | 0.0               | 0.0             | 8.715     | A                             |
|          | B-A    | 154                   | 38                      | 433               | 0.355 | 155                 | 1.0               | 0.6             | 14.311    | B                             |
|          | C-AB   | 12                    | 3                       | 544               | 0.022 | 12                  | 0.0               | 0.0             | 7.444     | A                             |
|          | C-A    | 407                   | 102                     |                   |       | 407                 |                   |                 |           |                               |
|          | A-B    | 209                   | 52                      |                   |       | 209                 |                   |                 |           |                               |
|          | A-C    | 279                   | 70                      |                   |       | 279                 |                   |                 |           |                               |

| Junctions 10                                                                                                                                                     |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| PICADY 10 - Priority Intersection Module                                                                                                                         |  |  |  |  |  |  |  |  |  |
| Version: 10.1.1.1905                                                                                                                                             |  |  |  |  |  |  |  |  |  |
| © Copyright TRL Software Limited, 2023                                                                                                                           |  |  |  |  |  |  |  |  |  |
| For sales and distribution information, program advice and maintenance, contact TRL Software:                                                                    |  |  |  |  |  |  |  |  |  |
| +44 (0)1344 379777 software@trl.co.uk trlsoftware.com                                                                                                            |  |  |  |  |  |  |  |  |  |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |  |  |  |  |  |  |  |  |

Filename: 2024 With Quarry Traffic.j10

Path: Z:\Documents\PARAGON HIGHWAYS\Bromley Farm Quarry\PICADY\PICADY Sovereign\PICADY standard

Report generation date: 1/8/2025 9:32:52 AM

»2024 + DEV, AM

»2024 + DEV, PM

### Summary of junction performance

|                           | AM     |             |           |      |     | PM     |             |           |      |     |
|---------------------------|--------|-------------|-----------|------|-----|--------|-------------|-----------|------|-----|
|                           | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS |
| 2024 + DEV                |        |             |           |      |     |        |             |           |      |     |
| Junction 1 - Stream B-CD  | D1     | 0.4         | 71.45     | 0.26 | F   | D2     | 0.1         | 22.61     | 0.11 | C   |
| Junction 1 - Stream B-AD  |        | 5.5         | 68.85     | 0.86 | F   |        | 2.2         | 32.18     | 0.68 | D   |
| Junction 1 - Stream A-BCD |        | 0.1         | 4.54      | 0.05 | A   |        | 0.1         | 4.29      | 0.05 | A   |
| Junction 1 - Stream D-ABC |        | 0.1         | 12.12     | 0.09 | B   |        | 0.1         | 10.08     | 0.10 | B   |
| Junction 1 - Stream C-B   |        | 0.1         | 9.91      | 0.12 | A   |        | 0.1         | 10.17     | 0.10 | B   |
| Junction 2 - Stream B-C   |        | 0.1         | 10.30     | 0.06 | B   |        | 0.1         | 15.53     | 0.06 | C   |
| Junction 2 - Stream B-A   |        | 1.2         | 19.89     | 0.52 | C   |        | 2.2         | 34.51     | 0.68 | D   |
| Junction 2 - Stream C-AB  |        | 0.1         | 8.38      | 0.07 | A   |        | 0.0         | 8.48      | 0.04 | A   |

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

### File summary

#### File Description

|             |                                        |
|-------------|----------------------------------------|
| Title       | Bromley Farm Quarry, Upper Cumberworth |
| Location    | A629/ A635 Sovereign Crossroads        |
| Site number | 2074                                   |
| Date        | 8/1/2025                               |
| Version     | 2                                      |
| Status      |                                        |
| Identifier  |                                        |
| Client      | SE                                     |
| Jobnumber   | 2074C                                  |
| Enumerator  | AH                                     |
| Description | 2024 With Quarry Traffic               |

### Units

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

## Analysis Options

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

## Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2024 + DEV    | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |
| D2 | 2024 + DEV    | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

## Analysis Set Details

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

# 2024 + DEV, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Arm D Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | Crossroads    | Two-way         | Two-way         | Two-way         | Two-way         |                       | 13.34              | B            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                 |                       | 3.36               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 8.87              | A           |

## Arms

### Arms

| Junction | Arm | Name                | Description                        | Arm type |
|----------|-----|---------------------|------------------------------------|----------|
| 1        | A   | A629 Lane Head Road | South of Holmfirth Road A635 Junct | Major    |
|          | B   | A635 Holmfirth Road |                                    | Minor    |
|          | C   | A629 Lane Head Road | North of Holmfirth Road A635 Junct | Major    |
|          | D   | PFS Access          | Opposite Holmfirth Road A635 Junct | Minor    |
| 2        | A   | A629 Lane Head Road | North of Barnsley Road A635 Junct  | Major    |
|          | B   | A635 Barnsley Road  |                                    | Minor    |
|          | C   | A629 Penistone Road |                                    | Major    |

### Major Arm Geometry

| Junction | Arm | Width of carriageway (m) | Has kerbed central reserve | Has right-turn storage | Width for right-turn storage (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|----------|-----|--------------------------|----------------------------|------------------------|----------------------------------|-------------------------------|---------|----------------------|
| 1        | A   | 6.90                     |                            |                        |                                  | 120.0                         | ✓       | 0.00                 |
|          | C   | 6.90                     |                            | ✓                      | 2.40                             | 80.0                          |         | -                    |
| 2        | C   | 7.00                     |                            | ✓                      | 2.50                             | 120.0                         | ✓       | 9.00                 |

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

### Minor Arm Geometry

| Junction | Arm | Minor arm type      | Lane width (m) | 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) |
|----------|-----|---------------------|----------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| 1        | B   | One lane plus flare |                | 10.00                 | 9.50            | 5.80             | 4.40             | 3.30             |                       | 1.00               | 50                     | 131                     |
|          | D   | One lane            | 5.00           |                       |                 |                  |                  |                  |                       |                    | 56                     | 36                      |
| 2        | B   | One lane plus flare |                | 10.00                 | 9.00            | 6.30             | 4.60             | 3.80             |                       | 1.00               | 73                     | 33                      |

## 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                | 643                | -             | -             | -             | -             | -             | -             | 0.240         | 0.342         | 0.240         | -             | -             | -             |
|          | B-A                | 642                | 0.112         | 0.284         | 0.284         | -             | -             | -             | 0.179         | 0.406         | -             | 0.284         | 0.284         | 0.142         |
|          | B-C                | 681                | 0.100         | 0.254         | -             | -             | -             | -             | -             | -             | -             | -             | -             | -             |
|          | B-D, nearside lane | 539                | 0.094         | 0.238         | 0.238         | -             | -             | -             | 0.150         | 0.340         | 0.150         | -             | -             | -             |
|          | B-D, offside lane  | 642                | 0.112         | 0.284         | 0.284         | -             | -             | -             | 0.179         | 0.406         | 0.179         | -             | -             | -             |
|          | C-B                | 634                | 0.236         | 0.236         | 0.337         | -             | -             | -             | -             | -             | -             | -             | -             | -             |
|          | D-A                | 776                | -             | -             | -             | -             | -             | -             | 0.289         | -             | 0.114         | -             | -             | -             |
|          | D-B, nearside lane | 616                | 0.172         | 0.172         | 0.389         | -             | -             | -             | 0.273         | 0.273         | 0.108         | -             | -             | -             |
|          | D-B, offside lane  | 616                | 0.172         | 0.172         | 0.389         | -             | -             | -             | 0.273         | 0.273         | 0.108         | -             | -             | -             |
|          | D-C                | 616                | -             | 0.172         | 0.389         | 0.136         | 0.273         | 0.273         | 0.273         | 0.273         | 0.108         | -             | -             | -             |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 2        | B-A    | 600                | 0.104         | 0.264         | 0.166         | 0.377         |
|          | B-C    | 625                | 0.092         | 0.232         | -             | -             |
|          | C-B    | 664                | 0.246         | 0.246         | -             | -             |

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

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

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2024 + DEV    | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 693                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 298                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 595                     | 100.000            |
|          | D   |            | ONE HOUR     | ✓            | 30                      | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 575                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 218                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 518                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      |   | To  |     |     |    |
|------|---|-----|-----|-----|----|
|      |   | A   | B   | C   | D  |
| From | A | 0   | 342 | 339 | 12 |
|      | B | 280 | 0   | 3   | 15 |
|      | C | 509 | 48  | 0   | 38 |
|      | D | 7   | 8   | 15  | 0  |

### Demand (PCU/hr)

#### Junction 2

|      | To |     |     |    |
|------|----|-----|-----|----|
|      |    | A   | B   | C  |
| From | A  | 0   | 485 | 90 |
|      | B  | 196 | 0   | 22 |
|      | C  | 485 | 33  | 0  |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|      | To |    |    |    |    |
|------|----|----|----|----|----|
|      |    | A  | B  | C  | D  |
| From | A  | 10 | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 | 10 |
|      | D  | 10 | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|      | To |    |    |    |
|------|----|----|----|----|
| From |    | A  | B  | C  |
|      | A  | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-CD   | 0.26    | 71.45         | 0.4             | F       | 14                      | 22                            |
|          | B-AD   | 0.86    | 68.85         | 5.5             | F       | 259                     | 389                           |
|          | A-BCD  | 0.05    | 4.54          | 0.1             | A       | 33                      | 50                            |
|          | A-B    |         |               |                 |         | 303                     | 454                           |
|          | A-C    |         |               |                 |         | 300                     | 450                           |
|          | D-ABC  | 0.09    | 12.12         | 0.1             | B       | 28                      | 41                            |
|          | C-D    |         |               |                 |         | 35                      | 52                            |
|          | C-A    |         |               |                 |         | 467                     | 701                           |
| 2        | C-B    | 0.12    | 9.91          | 0.1             | A       | 44                      | 66                            |
|          | B-C    | 0.06    | 10.30         | 0.1             | B       | 20                      | 30                            |
|          | B-A    | 0.52    | 19.89         | 1.2             | C       | 180                     | 270                           |
|          | C-AB   | 0.07    | 8.38          | 0.1             | A       | 30                      | 45                            |
|          | C-A    |         |               |                 |         | 445                     | 668                           |
|          | A-B    |         |               |                 |         | 445                     | 668                           |
|          | A-C    |         |               |                 |         | 83                      | 124                           |

## Main Results for each time segment

### 07:15 - 07:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 11                    | 3                       | 321               | 0.033 | 10                  | 0.0               | 0.0             | 12.737    | B                             |
|          | B-AD   | 214                   | 53                      | 450               | 0.475 | 210                 | 0.0               | 1.0             | 16.261    | C                             |
|          | ABCD   | 21                    | 5                       | 893               | 0.024 | 21                  | 0.0               | 0.0             | 4.539     | A                             |
|          | AB     | 251                   | 63                      |                   |       | 251                 |                   |                 |           |                               |
|          | AC     | 249                   | 62                      |                   |       | 249                 |                   |                 |           |                               |
|          | D-ABC  | 23                    | 6                       | 455               | 0.050 | 22                  | 0.0               | 0.1             | 9.156     | A                             |
|          | C-D    | 29                    | 7                       |                   |       | 29                  |                   |                 |           |                               |
|          | C-A    | 383                   | 96                      |                   |       | 383                 |                   |                 |           |                               |
| 2        | C-B    | 36                    | 9                       | 510               | 0.071 | 36                  | 0.0               | 0.1             | 8.349     | A                             |
|          | B-C    | 17                    | 4                       | 514               | 0.032 | 16                  | 0.0               | 0.0             | 7.954     | A                             |
|          | B-A    | 148                   | 37                      | 473               | 0.312 | 146                 | 0.0               | 0.5             | 12.008    | B                             |
|          | C-AB   | 25                    | 6                       | 558               | 0.045 | 25                  | 0.0               | 0.1             | 7.425     | A                             |
|          | C-A    | 365                   | 91                      |                   |       | 365                 |                   |                 |           |                               |
|          | AB     | 365                   | 91                      |                   |       | 365                 |                   |                 |           |                               |
|          | AC     | 68                    | 17                      |                   |       | 68                  |                   |                 |           |                               |

### 07:30 - 07:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 14                    | 3                       | 240               | 0.057 | 14                  | 0.0               | 0.1             | 17.459    | C                             |
|          | B-AD   | 254                   | 64                      | 412               | 0.617 | 251                 | 1.0               | 1.7             | 24.227    | C                             |
|          | ABCD   | 30                    | 8                       | 949               | 0.032 | 30                  | 0.0               | 0.0             | 4.309     | A                             |
|          | AB     | 298                   | 74                      |                   |       | 298                 |                   |                 |           |                               |
|          | AC     | 295                   | 74                      |                   |       | 295                 |                   |                 |           |                               |
|          | D-ABC  | 27                    | 7                       | 416               | 0.065 | 27                  | 0.1               | 0.1             | 10.186    | B                             |
|          | C-D    | 34                    | 9                       |                   |       | 34                  |                   |                 |           |                               |
|          | C-A    | 458                   | 114                     |                   |       | 458                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 486               | 0.089 | 43                  | 0.1               | 0.1             | 8.944     | A                             |
|          | B-C    | 20                    | 5                       | 478               | 0.041 | 20                  | 0.0               | 0.0             | 8.647     | A                             |
|          | B-A    | 176                   | 44                      | 449               | 0.393 | 175                 | 0.5               | 0.7             | 14.437    | B                             |
|          | C-AB   | 30                    | 7                       | 537               | 0.055 | 30                  | 0.1               | 0.1             | 7.801     | A                             |
|          | C-A    | 436                   | 109                     |                   |       | 436                 |                   |                 |           |                               |
|          | AB     | 436                   | 109                     |                   |       | 436                 |                   |                 |           |                               |
|          | AC     | 81                    | 20                      |                   |       | 81                  |                   |                 |           |                               |

### 07:45 - 08:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 19                    | 5                       | 93                | 0.201 | 18                  | 0.1               | 0.3             | 52.065    | F                             |
|          | B-AD   | 309                   | 77                      | 359               | 0.862 | 297                 | 1.7               | 4.8             | 55.253    | F                             |
|          | ABCD   | 49                    | 12                      | 1030              | 0.047 | 49                  | 0.0               | 0.1             | 4.033     | A                             |
|          | AB     | 359                   | 90                      |                   |       | 359                 |                   |                 |           |                               |
|          | AC     | 356                   | 89                      |                   |       | 356                 |                   |                 |           |                               |
|          | D-ABC  | 33                    | 8                       | 361               | 0.092 | 33                  | 0.1               | 0.1             | 12.067    | B                             |
|          | C-D    | 42                    | 10                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 560                   | 140                     |                   |       | 560                 |                   |                 |           |                               |
| 2        | C-B    | 53                    | 13                      | 452               | 0.117 | 53                  | 0.1               | 0.1             | 9.908     | A                             |
|          | B-C    | 24                    | 6                       | 411               | 0.059 | 24                  | 0.0               | 0.1             | 10.235    | B                             |
|          | B-A    | 216                   | 54                      | 415               | 0.521 | 214                 | 0.7               | 1.1             | 19.559    | C                             |
|          | C-AB   | 36                    | 9                       | 509               | 0.071 | 36                  | 0.1               | 0.1             | 8.383     | A                             |
|          | C-A    | 534                   | 133                     |                   |       | 534                 |                   |                 |           |                               |
|          | AB     | 534                   | 133                     |                   |       | 534                 |                   |                 |           |                               |
|          | AC     | 99                    | 25                      |                   |       | 99                  |                   |                 |           |                               |

## 08:00 - 08:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 19                    | 5                       | 74                | 0.259 | 19                  | 0.3               | 0.4             | 71.448    | F                             |
|          | B-AD   | 309                   | 77                      | 359               | 0.862 | 306                 | 4.8               | 5.5             | 68.853    | F                             |
|          | ABCD   | 49                    | 12                      | 1031              | 0.047 | 49                  | 0.1               | 0.1             | 4.035     | A                             |
|          | AB     | 359                   | 90                      |                   |       | 359                 |                   |                 |           |                               |
|          | AC     | 356                   | 89                      |                   |       | 356                 |                   |                 |           |                               |
|          | D-ABC  | 33                    | 8                       | 360               | 0.092 | 33                  | 0.1               | 0.1             | 12.121    | B                             |
|          | C-D    | 42                    | 10                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 560                   | 140                     |                   |       | 560                 |                   |                 |           |                               |
| 2        | C-B    | 53                    | 13                      | 452               | 0.117 | 53                  | 0.1               | 0.1             | 9.912     | A                             |
|          | B-C    | 24                    | 6                       | 409               | 0.059 | 24                  | 0.1               | 0.1             | 10.298    | B                             |
|          | B-A    | 216                   | 54                      | 415               | 0.521 | 216                 | 1.1               | 1.2             | 19.887    | C                             |
|          | C-AB   | 36                    | 9                       | 509               | 0.071 | 36                  | 0.1               | 0.1             | 8.385     | A                             |
|          | C-A    | 534                   | 133                     |                   |       | 534                 |                   |                 |           |                               |
|          | AB     | 534                   | 133                     |                   |       | 534                 |                   |                 |           |                               |
|          | AC     | 99                    | 25                      |                   |       | 99                  |                   |                 |           |                               |

## 08:15 - 08:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 14                    | 3                       | 220               | 0.063 | 15                  | 0.4               | 0.1             | 19.371    | C                             |
|          | B-AD   | 254                   | 63                      | 412               | 0.617 | 268                 | 5.5               | 1.9             | 29.890    | D                             |
|          | ABCD   | 31                    | 8                       | 949               | 0.032 | 31                  | 0.1               | 0.0             | 4.311     | A                             |
|          | AB     | 298                   | 74                      |                   |       | 298                 |                   |                 |           |                               |
|          | AC     | 295                   | 74                      |                   |       | 295                 |                   |                 |           |                               |
|          | D-ABC  | 27                    | 7                       | 414               | 0.065 | 27                  | 0.1               | 0.1             | 10.246    | B                             |
|          | C-D    | 34                    | 9                       |                   |       | 34                  |                   |                 |           |                               |
|          | C-A    | 458                   | 114                     |                   |       | 458                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 486               | 0.089 | 43                  | 0.1               | 0.1             | 8.956     | A                             |
|          | B-C    | 20                    | 5                       | 475               | 0.042 | 20                  | 0.1               | 0.0             | 8.696     | A                             |
|          | B-A    | 176                   | 44                      | 449               | 0.393 | 178                 | 1.2               | 0.7             | 14.714    | B                             |
|          | C-AB   | 30                    | 7                       | 537               | 0.055 | 30                  | 0.1               | 0.1             | 7.806     | A                             |
|          | C-A    | 436                   | 109                     |                   |       | 436                 |                   |                 |           |                               |
|          | AB     | 436                   | 109                     |                   |       | 436                 |                   |                 |           |                               |
|          | AC     | 81                    | 20                      |                   |       | 81                  |                   |                 |           |                               |

## 08:30 - 08:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 11                    | 3                       | 315               | 0.034 | 11                  | 0.1               | 0.0             | 13.022    | B                             |
|          | B-AD   | 214                   | 53                      | 450               | 0.475 | 217                 | 1.9               | 1.0             | 17.280    | C                             |
|          | ABCD   | 21                    | 5                       | 893               | 0.024 | 21                  | 0.0               | 0.0             | 4.540     | A                             |
|          | AB     | 251                   | 63                      |                   |       | 251                 |                   |                 |           |                               |
|          | AC     | 249                   | 62                      |                   |       | 249                 |                   |                 |           |                               |
|          | D-ABC  | 23                    | 6                       | 454               | 0.050 | 23                  | 0.1               | 0.1             | 9.186     | A                             |
|          | C-D    | 29                    | 7                       |                   |       | 29                  |                   |                 |           |                               |
|          | C-A    | 383                   | 96                      |                   |       | 383                 |                   |                 |           |                               |
| 2        | C-B    | 36                    | 9                       | 510               | 0.071 | 36                  | 0.1               | 0.1             | 8.366     | A                             |
|          | B-C    | 17                    | 4                       | 512               | 0.032 | 17                  | 0.0               | 0.0             | 7.990     | A                             |
|          | B-A    | 148                   | 37                      | 473               | 0.312 | 148                 | 0.7               | 0.5             | 12.218    | B                             |
|          | C-AB   | 25                    | 6                       | 558               | 0.045 | 25                  | 0.1               | 0.1             | 7.432     | A                             |
|          | C-A    | 365                   | 91                      |                   |       | 365                 |                   |                 |           |                               |
|          | AB     | 365                   | 91                      |                   |       | 365                 |                   |                 |           |                               |
|          | AC     | 68                    | 17                      |                   |       | 68                  |                   |                 |           |                               |

# 2024 + DEV, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Arm D Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | Crossroads    | Two-way         | Two-way         | Two-way         | Two-way         |                       | 5.58               | A            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                 |                       | 5.42               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.51              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2024 + DEV    | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 770                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 250                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 521                     | 100.000            |
|          | D   |            | ONE HOUR     | ✓            | 39                      | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 663                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 232                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 557                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      |   | To  |     |     |    |
|------|---|-----|-----|-----|----|
|      |   | A   | B   | C   | D  |
| From | A | 0   | 481 | 278 | 11 |
|      | B | 228 | 0   | 4   | 18 |
|      | C | 435 | 39  | 0   | 47 |
|      | D | 18  | 10  | 11  | 0  |

### Demand (PCU/hr)

#### Junction 2

|      |   | To  |     |     |
|------|---|-----|-----|-----|
|      |   | A   | B   | C   |
| From | A | 0   | 292 | 371 |
|      | B | 218 | 0   | 14  |
|      | C | 541 | 16  | 0   |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|      |   | To |    |    |    |
|------|---|----|----|----|----|
|      |   | A  | B  | C  | D  |
| From | A | 10 | 10 | 10 | 10 |
|      | B | 10 | 10 | 10 | 10 |
|      | C | 10 | 10 | 10 | 10 |
|      | D | 10 | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|      |   | To |    |    |
|------|---|----|----|----|
|      |   | A  | B  | C  |
| From | A | 10 | 10 | 10 |
|      | B | 10 | 10 | 10 |
|      | C | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-CD   | 0.11    | 22.61         | 0.1             | C       | 16                      | 25                            |
|          | B-AD   | 0.68    | 32.18         | 2.2             | D       | 213                     | 320                           |
|          | A-BCD  | 0.05    | 4.29          | 0.1             | A       | 34                      | 51                            |
|          | A-B    |         |               |                 |         | 426                     | 639                           |
|          | A-C    |         |               |                 |         | 246                     | 370                           |
|          | D-ABC  | 0.10    | 10.08         | 0.1             | B       | 36                      | 54                            |
|          | C-D    |         |               |                 |         | 43                      | 65                            |
|          | C-A    |         |               |                 |         | 399                     | 599                           |
| 2        | C-B    | 0.10    | 10.17         | 0.1             | B       | 36                      | 54                            |
|          | B-C    | 0.06    | 15.53         | 0.1             | C       | 13                      | 19                            |
|          | B-A    | 0.68    | 34.51         | 2.2             | D       | 200                     | 300                           |
|          | C-AB   | 0.04    | 8.48          | 0.0             | A       | 15                      | 22                            |
|          | C-A    |         |               |                 |         | 496                     | 745                           |
|          | A-B    |         |               |                 |         | 268                     | 402                           |
|          | A-C    |         |               |                 |         | 340                     | 511                           |

## Main Results for each time segment

### 16:30 - 16:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 12                    | 3                       | 363               | 0.034 | 12                  | 0.0               | 0.0             | 11.286    | B                             |
|          | B-AD   | 176                   | 44                      | 461               | 0.382 | 173                 | 0.0               | 0.7             | 13.652    | B                             |
|          | ABCD   | 21                    | 5                       | 944               | 0.022 | 21                  | 0.0               | 0.0             | 4.287     | A                             |
|          | AB     | 354                   | 89                      |                   |       | 354                 |                   |                 |           |                               |
|          | AC     | 205                   | 51                      |                   |       | 205                 |                   |                 |           |                               |
|          | D-ABC  | 29                    | 7                       | 518               | 0.057 | 29                  | 0.0               | 0.1             | 8.093     | A                             |
|          | C-D    | 35                    | 9                       |                   |       | 35                  |                   |                 |           |                               |
|          | C-A    | 327                   | 82                      |                   |       | 327                 |                   |                 |           |                               |
|          | C-B    | 29                    | 7                       | 496               | 0.059 | 29                  | 0.0               | 0.1             | 8.475     | A                             |
| 2        | B-C    | 11                    | 3                       | 459               | 0.023 | 10                  | 0.0               | 0.0             | 8.834     | A                             |
|          | B-A    | 164                   | 41                      | 432               | 0.380 | 161                 | 0.0               | 0.7             | 14.454    | B                             |
|          | C-AB   | 12                    | 3                       | 542               | 0.022 | 12                  | 0.0               | 0.0             | 7.477     | A                             |
|          | C-A    | 407                   | 102                     |                   |       | 407                 |                   |                 |           |                               |
|          | AB     | 220                   | 55                      |                   |       | 220                 |                   |                 |           |                               |
|          | AC     | 279                   | 70                      |                   |       | 279                 |                   |                 |           |                               |

### 16:45 - 17:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 16                    | 4                       | 303               | 0.052 | 16                  | 0.0               | 0.1             | 13.775    | B                             |
|          | B-AD   | 209                   | 52                      | 425               | 0.492 | 208                 | 0.7               | 1.0             | 18.062    | C                             |
|          | ABCD   | 31                    | 8                       | 1010              | 0.030 | 31                  | 0.0               | 0.0             | 4.043     | A                             |
|          | AB     | 419                   | 105                     |                   |       | 419                 |                   |                 |           |                               |
|          | AC     | 242                   | 61                      |                   |       | 242                 |                   |                 |           |                               |
|          | D-ABC  | 35                    | 9                       | 484               | 0.072 | 35                  | 0.1               | 0.1             | 8.814     | A                             |
|          | C-D    | 42                    | 11                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 391                   | 98                      |                   |       | 391                 |                   |                 |           |                               |
|          | C-B    | 35                    | 9                       | 469               | 0.075 | 35                  | 0.1               | 0.1             | 9.114     | A                             |
| 2        | B-C    | 13                    | 3                       | 399               | 0.032 | 13                  | 0.0               | 0.0             | 10.244    | B                             |
|          | B-A    | 196                   | 49                      | 399               | 0.491 | 195                 | 0.7               | 1.0             | 19.216    | C                             |
|          | C-AB   | 14                    | 4                       | 518               | 0.028 | 14                  | 0.0               | 0.0             | 7.867     | A                             |
|          | C-A    | 486                   | 122                     |                   |       | 486                 |                   |                 |           |                               |
|          | AB     | 263                   | 66                      |                   |       | 263                 |                   |                 |           |                               |
|          | AC     | 334                   | 83                      |                   |       | 334                 |                   |                 |           |                               |

### 17:00 - 17:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 21                    | 5                       | 201               | 0.104 | 21                  | 0.1               | 0.1             | 21.900    | C                             |
|          | B-AD   | 254                   | 64                      | 376               | 0.676 | 250                 | 1.0               | 2.1             | 30.415    | D                             |
|          | ABCD   | 50                    | 12                      | 1104              | 0.045 | 50                  | 0.0               | 0.1             | 3.754     | A                             |
|          | AB     | 506                   | 126                     |                   |       | 506                 |                   |                 |           |                               |
|          | AC     | 292                   | 73                      |                   |       | 292                 |                   |                 |           |                               |
|          | D-ABC  | 43                    | 11                      | 436               | 0.099 | 43                  | 0.1               | 0.1             | 10.071    | B                             |
|          | C-D    | 52                    | 13                      |                   |       | 52                  |                   |                 |           |                               |
|          | C-A    | 479                   | 120                     |                   |       | 479                 |                   |                 |           |                               |
|          | C-B    | 43                    | 11                      | 432               | 0.099 | 43                  | 0.1               | 0.1             | 10.159    | B                             |
| 2        | B-C    | 15                    | 4                       | 278               | 0.055 | 15                  | 0.0               | 0.1             | 15.042    | C                             |
|          | B-A    | 240                   | 60                      | 353               | 0.679 | 236                 | 1.0               | 2.1             | 32.496    | D                             |
|          | C-AB   | 18                    | 4                       | 485               | 0.036 | 18                  | 0.0               | 0.0             | 8.477     | A                             |
|          | C-A    | 596                   | 149                     |                   |       | 596                 |                   |                 |           |                               |
|          | AB     | 321                   | 80                      |                   |       | 321                 |                   |                 |           |                               |
|          | AC     | 408                   | 102                     |                   |       | 408                 |                   |                 |           |                               |

## 17:15 - 17:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 21                    | 5                       | 196               | 0.108 | 21                  | 0.1               | 0.1             | 22.610    | C                             |
|          | B-AD   | 254                   | 64                      | 376               | 0.676 | 254                 | 2.1               | 2.2             | 32.177    | D                             |
|          | ABCD   | 50                    | 13                      | 1104              | 0.045 | 50                  | 0.1               | 0.1             | 3.755     | A                             |
|          | AB     | 506                   | 126                     |                   |       | 506                 |                   |                 |           |                               |
|          | AC     | 292                   | 73                      |                   |       | 292                 |                   |                 |           |                               |
|          | D-ABC  | 43                    | 11                      | 436               | 0.099 | 43                  | 0.1               | 0.1             | 10.084    | B                             |
|          | C-D    | 52                    | 13                      |                   |       | 52                  |                   |                 |           |                               |
|          | C-A    | 479                   | 120                     |                   |       | 479                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 432               | 0.099 | 43                  | 0.1               | 0.1             | 10.165    | B                             |
|          | B-C    | 15                    | 4                       | 270               | 0.057 | 15                  | 0.1               | 0.1             | 15.532    | C                             |
|          | B-A    | 240                   | 60                      | 353               | 0.679 | 240                 | 2.1               | 2.2             | 34.510    | D                             |
|          | C-AB   | 18                    | 4                       | 485               | 0.036 | 18                  | 0.0               | 0.0             | 8.477     | A                             |
|          | C-A    | 596                   | 149                     |                   |       | 596                 |                   |                 |           |                               |
|          | AB     | 321                   | 80                      |                   |       | 321                 |                   |                 |           |                               |
|          | AC     | 408                   | 102                     |                   |       | 408                 |                   |                 |           |                               |

## 17:30 - 17:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 16                    | 4                       | 298               | 0.053 | 16                  | 0.1               | 0.1             | 14.069    | B                             |
|          | B-AD   | 209                   | 52                      | 425               | 0.492 | 213                 | 2.2               | 1.1             | 19.044    | C                             |
|          | ABCD   | 31                    | 8                       | 1010              | 0.030 | 31                  | 0.1               | 0.0             | 4.045     | A                             |
|          | AB     | 419                   | 105                     |                   |       | 419                 |                   |                 |           |                               |
|          | AC     | 242                   | 61                      |                   |       | 242                 |                   |                 |           |                               |
|          | D-ABC  | 35                    | 9                       | 484               | 0.072 | 35                  | 0.1               | 0.1             | 8.831     | A                             |
|          | C-D    | 42                    | 11                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 391                   | 98                      |                   |       | 391                 |                   |                 |           |                               |
| 2        | C-B    | 35                    | 9                       | 469               | 0.075 | 35                  | 0.1               | 0.1             | 9.122     | A                             |
|          | B-C    | 13                    | 3                       | 392               | 0.032 | 13                  | 0.1               | 0.0             | 10.447    | B                             |
|          | B-A    | 196                   | 49                      | 399               | 0.491 | 200                 | 2.2               | 1.1             | 20.342    | C                             |
|          | C-AB   | 14                    | 4                       | 518               | 0.028 | 14                  | 0.0               | 0.0             | 7.868     | A                             |
|          | C-A    | 486                   | 122                     |                   |       | 486                 |                   |                 |           |                               |
|          | AB     | 263                   | 66                      |                   |       | 263                 |                   |                 |           |                               |
|          | AC     | 334                   | 83                      |                   |       | 334                 |                   |                 |           |                               |

## 17:45 - 18:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 12                    | 3                       | 360               | 0.034 | 12                  | 0.1               | 0.0             | 11.399    | B                             |
|          | B-AD   | 176                   | 44                      | 461               | 0.382 | 177                 | 1.1               | 0.7             | 14.072    | B                             |
|          | ABCD   | 21                    | 5                       | 944               | 0.022 | 21                  | 0.0               | 0.0             | 4.289     | A                             |
|          | AB     | 354                   | 89                      |                   |       | 354                 |                   |                 |           |                               |
|          | AC     | 205                   | 51                      |                   |       | 205                 |                   |                 |           |                               |
|          | D-ABC  | 29                    | 7                       | 518               | 0.057 | 29                  | 0.1               | 0.1             | 8.112     | A                             |
|          | C-D    | 35                    | 9                       |                   |       | 35                  |                   |                 |           |                               |
|          | C-A    | 327                   | 82                      |                   |       | 327                 |                   |                 |           |                               |
| 2        | C-B    | 29                    | 7                       | 496               | 0.059 | 29                  | 0.1               | 0.1             | 8.488     | A                             |
|          | B-C    | 11                    | 3                       | 455               | 0.023 | 11                  | 0.0               | 0.0             | 8.910     | A                             |
|          | B-A    | 164                   | 41                      | 432               | 0.380 | 166                 | 1.1               | 0.7             | 14.960    | B                             |
|          | C-AB   | 12                    | 3                       | 542               | 0.022 | 12                  | 0.0               | 0.0             | 7.478     | A                             |
|          | C-A    | 407                   | 102                     |                   |       | 407                 |                   |                 |           |                               |
|          | AB     | 220                   | 55                      |                   |       | 220                 |                   |                 |           |                               |
|          | AC     | 279                   | 70                      |                   |       | 279                 |                   |                 |           |                               |

| Junctions 10                                                                                                                                                     |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| PICADY 10 - Priority Intersection Module                                                                                                                         |  |  |  |
| Version: 10.1.1.1905                                                                                                                                             |  |  |  |
| © Copyright TRL Software Limited, 2023                                                                                                                           |  |  |  |
| For sales and distribution information, program advice and maintenance, contact TRL Software:                                                                    |  |  |  |
| +44 (0)1344 379777   software@trl.co.uk   trlsoftware.com                                                                                                        |  |  |  |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |  |  |

**Filename:** 2024 Base AM Adjusted.j10

**Path:** Z:\Documents\PARAGON HIGHWAYS\Bromley Farm Quarry\PICADY\PICADY Sovereign\PICADY custom

**Report generation date:** 12/14/2024 10:28:29 AM

## «2024 Base Custom, AM

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

## Summary of junction performance

|                           | AM               |           |      |     |
|---------------------------|------------------|-----------|------|-----|
|                           | Queue (PCU)      | Delay (s) | RFC  | LOS |
|                           | 2024 Base Custom |           |      |     |
| Junction 1 - Stream B-CD  | 2.2              | 399.08    | 0.99 | F   |
| Junction 1 - Stream B-AD  | 11.0             | 141.33    | 0.98 | F   |
| Junction 1 - Stream A-BCD | 0.1              | 4.58      | 0.05 | A   |
| Junction 1 - Stream D-ABC | 0.1              | 12.12     | 0.09 | B   |
| Junction 1 - Stream C-B   | 0.1              | 9.82      | 0.12 | A   |
| Junction 2 - Stream B-C   | 0.4              | 67.18     | 0.30 | F   |
| Junction 2 - Stream B-A   | 5.3              | 103.85    | 0.87 | F   |
| Junction 2 - Stream C-AB  | 0.1              | 8.32      | 0.07 | A   |

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

## File summary

### File Description

|                    |                                        |
|--------------------|----------------------------------------|
| <b>Title</b>       | Bromley Farm Quarry, Upper Cumberworth |
| <b>Location</b>    | A629/ A635 Sovereign Crossroads        |
| <b>Site number</b> | 2074                                   |
| <b>Date</b>        | 11/19/2024                             |
| <b>Version</b>     | 2                                      |
| <b>Status</b>      |                                        |
| <b>Identifier</b>  |                                        |
| <b>Client</b>      | SE                                     |
| <b>Jobnumber</b>   | 2074C                                  |
| <b>Enumerator</b>  | AH                                     |
| <b>Description</b> | 2024 Base                              |

## Units

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

## Analysis Options

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

## Analysis Set Details

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

# 2024 Base Custom, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Arm D Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | Crossroads    | Two-way         | Two-way         | Two-way         | Two-way         |                       | 28.57              | D            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                 |                       | 16.10              | C            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 22.99             | C           |

## Arms

### Arms

| Junction | Arm | Name                | Description                        | Arm type |
|----------|-----|---------------------|------------------------------------|----------|
| 1        | A   | A629 Lane Head Road | South of Holmfirth Road A635 Junct | Major    |
|          | B   | A635 Holmfirth Road |                                    | Minor    |
|          | C   | A629 Lane Head Road | North of Holmfirth Road A635 Junct | Major    |
|          | D   | PFS Access          | Opposite Holmfirth Road A635 Junct | Minor    |
| 2        | A   | A629 Lane Head Road | North of Barnsley Road A635 Junct  | Major    |
|          | B   | A635 Barnsley Road  |                                    | Minor    |
|          | C   | A629 Penistone Road |                                    | Major    |

### Major Arm Geometry

| Junction | Arm | Width of carriageway (m) | Has kerbed central reserve | Has right-turn storage | Width for right-turn storage (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|----------|-----|--------------------------|----------------------------|------------------------|----------------------------------|-------------------------------|---------|----------------------|
| 1        | A   | 6.90                     |                            |                        |                                  | 120.0                         | ✓       | 0.00                 |
|          | C   | 6.90                     |                            | ✓                      | 2.40                             | 80.0                          |         | -                    |
| 2        | C   | 7.00                     |                            | ✓                      | 2.50                             | 120.0                         | ✓       | 9.00                 |

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

### Minor Arm Geometry

| Junction | Arm | Minor arm type      | Lane width (m) | 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) |
|----------|-----|---------------------|----------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| 1        | B   | One lane plus flare |                | 10.00                 | 9.50            | 5.80             | 4.40             | 3.30             |                       | 1.00               | 50                     | 131                     |
|          | D   | One lane            | 5.00           |                       |                 |                  |                  |                  |                       |                    | 56                     | 36                      |
| 2        | B   | One lane plus flare |                | 10.00                 | 9.00            | 6.30             | 4.60             | 3.80             |                       | 1.00               | 73                     | 33                      |

### Slope / Intercept / Capacity

#### Custom Intercept Adjustments

| Junction | Custom stream intercept adjustment | Stream | Use adjustment | Reason       | Direct intercept adjustment (PCU/hr) |
|----------|------------------------------------|--------|----------------|--------------|--------------------------------------|
| 1        | 1                                  | B-A    | ✓              | Queue Survey | -61                                  |
| 2        | 1                                  | B-A    | ✓              | Queue        | -186                                 |

### 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                | 643                | -             | -             | -             | -             | -             | -             | 0.240         | 0.342         | 0.240         | -             | -             | -             |
|          | B-A                | 581                | 0.112         | 0.284         | 0.284         | -             | -             | -             | 0.179         | 0.406         | -             | 0.284         | 0.284         | 0.142         |
|          | B-C                | 681                | 0.100         | 0.254         | -             | -             | -             | -             | -             | -             | -             | -             | -             | -             |
|          | B-D, nearside lane | 539                | 0.094         | 0.238         | 0.238         | -             | -             | -             | 0.150         | 0.341         | 0.150         | -             | -             | -             |
|          | B-D, offside lane  | 642                | 0.112         | 0.284         | 0.284         | -             | -             | -             | 0.179         | 0.406         | 0.179         | -             | -             | -             |
|          | C-B                | 634                | 0.236         | 0.236         | 0.337         | -             | -             | -             | -             | -             | -             | -             | -             | -             |
|          | D-A                | 776                | -             | -             | -             | -             | -             | -             | 0.289         | -             | 0.114         | -             | -             | -             |
|          | D-B, nearside lane | 616                | 0.172         | 0.172         | 0.389         | -             | -             | -             | 0.273         | 0.273         | 0.108         | -             | -             | -             |
|          | D-B, offside lane  | 616                | 0.172         | 0.172         | 0.389         | -             | -             | -             | 0.273         | 0.273         | 0.108         | -             | -             | -             |
|          | D-C                | 616                | -             | 0.172         | 0.389         | 0.136         | 0.273         | 0.273         | 0.273         | 0.273         | 0.108         | -             | -             | -             |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 2        | B-A    | 413                | 0.104         | 0.264         | 0.166         | 0.377         |
|          | B-C    | 625                | 0.092         | 0.232         | -             | -             |
|          | C-B    | 664                | 0.246         | 0.246         | -             | -             |

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

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

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name    | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2024 Base Custom | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 679                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 284                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 595                     | 100.000            |
|          | D   |            | ONE HOUR     | ✓            | 30                      | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 561                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 204                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 518                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      |   | To  |     |     |    |
|------|---|-----|-----|-----|----|
|      |   | A   | B   | C   | D  |
| From | A | 0   | 328 | 339 | 12 |
|      | B | 266 | 0   | 3   | 15 |
|      | C | 509 | 48  | 0   | 38 |
|      | D | 7   | 8   | 15  | 0  |

### Demand (PCU/hr)

#### Junction 2

|      | To |     |     |    |
|------|----|-----|-----|----|
|      |    | A   | B   | C  |
| From | A  | 0   | 471 | 90 |
|      | B  | 182 | 0   | 22 |
|      | C  | 485 | 33  | 0  |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|      | To |    |    |    |    |
|------|----|----|----|----|----|
|      |    | A  | B  | C  | D  |
| From | A  | 10 | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 | 10 |
|      | D  | 10 | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|      | To |    |    |    |
|------|----|----|----|----|
| From |    | A  | B  | C  |
|      | A  | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-CD   | 0.99    | 399.08        | 2.2             | F       | 15                      | 23                            |
|          | B-AD   | 0.98    | 141.33        | 11.0            | F       | 246                     | 368                           |
|          | A-BCD  | 0.05    | 4.58          | 0.1             | A       | 33                      | 49                            |
|          | A-B    |         |               |                 |         | 290                     | 435                           |
|          | A-C    |         |               |                 |         | 300                     | 450                           |
|          | D-ABC  | 0.09    | 12.12         | 0.1             | B       | 28                      | 41                            |
|          | C-D    |         |               |                 |         | 35                      | 52                            |
|          | C-A    |         |               |                 |         | 467                     | 701                           |
| 2        | C-B    | 0.12    | 9.82          | 0.1             | A       | 44                      | 66                            |
|          | B-C    | 0.30    | 67.18         | 0.4             | F       | 20                      | 30                            |
|          | B-A    | 0.87    | 103.85        | 5.3             | F       | 167                     | 251                           |
|          | C-AB   | 0.07    | 8.32          | 0.1             | A       | 30                      | 45                            |
|          | C-A    |         |               |                 |         | 445                     | 668                           |
|          | A-B    |         |               |                 |         | 432                     | 648                           |
|          | A-C    |         |               |                 |         | 83                      | 124                           |

## Main Results for each time segment

### 07:15 - 07:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 11                    | 3                       | 306               | 0.035 | 11                  | 0.0               | 0.0             | 13.398    | B                             |
|          | B-AD   | 203                   | 51                      | 391               | 0.519 | 198                 | 0.0               | 1.1             | 20.121    | C                             |
|          | ABCD   | 21                    | 5                       | 886               | 0.024 | 21                  | 0.0               | 0.0             | 4.576     | A                             |
|          | AB     | 241                   | 60                      |                   |       | 241                 |                   |                 |           |                               |
|          | AC     | 249                   | 62                      |                   |       | 249                 |                   |                 |           |                               |
|          | D-ABC  | 23                    | 6                       | 456               | 0.050 | 22                  | 0.0               | 0.1             | 9.126     | A                             |
|          | C-D    | 29                    | 7                       |                   |       | 29                  |                   |                 |           |                               |
|          | C-A    | 383                   | 96                      |                   |       | 383                 |                   |                 |           |                               |
| 2        | C-B    | 36                    | 9                       | 512               | 0.071 | 36                  | 0.0               | 0.1             | 8.305     | A                             |
|          | B-C    | 17                    | 4                       | 453               | 0.037 | 16                  | 0.0               | 0.0             | 9.060     | A                             |
|          | B-A    | 137                   | 34                      | 288               | 0.475 | 133                 | 0.0               | 0.9             | 24.981    | C                             |
|          | C-AB   | 25                    | 6                       | 560               | 0.044 | 25                  | 0.0               | 0.1             | 7.389     | A                             |
|          | C-A    | 365                   | 91                      |                   |       | 365                 |                   |                 |           |                               |
|          | AB     | 355                   | 89                      |                   |       | 355                 |                   |                 |           |                               |
|          | AC     | 68                    | 17                      |                   |       | 68                  |                   |                 |           |                               |

### 07:30 - 07:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 14                    | 4                       | 209               | 0.068 | 14                  | 0.0               | 0.1             | 20.309    | C                             |
|          | B-AD   | 241                   | 60                      | 353               | 0.683 | 237                 | 1.1               | 2.1             | 32.975    | D                             |
|          | ABCD   | 30                    | 7                       | 940               | 0.032 | 30                  | 0.0               | 0.0             | 4.349     | A                             |
|          | AB     | 285                   | 71                      |                   |       | 285                 |                   |                 |           |                               |
|          | AC     | 295                   | 74                      |                   |       | 295                 |                   |                 |           |                               |
|          | D-ABC  | 27                    | 7                       | 417               | 0.065 | 27                  | 0.1               | 0.1             | 10.145    | B                             |
|          | C-D    | 34                    | 9                       |                   |       | 34                  |                   |                 |           |                               |
|          | C-A    | 458                   | 114                     |                   |       | 458                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 489               | 0.088 | 43                  | 0.1               | 0.1             | 8.885     | A                             |
|          | B-C    | 20                    | 5                       | 358               | 0.055 | 20                  | 0.0               | 0.1             | 11.715    | B                             |
|          | B-A    | 164                   | 41                      | 264               | 0.620 | 161                 | 0.9               | 1.6             | 37.414    | E                             |
|          | C-AB   | 30                    | 7                       | 540               | 0.055 | 30                  | 0.1               | 0.1             | 7.753     | A                             |
|          | C-A    | 436                   | 109                     |                   |       | 436                 |                   |                 |           |                               |
|          | AB     | 423                   | 106                     |                   |       | 423                 |                   |                 |           |                               |
|          | AC     | 81                    | 20                      |                   |       | 81                  |                   |                 |           |                               |

### 07:45 - 08:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 20                    | 5                       | 20                | 0.989 | 13                  | 0.1               | 1.8             | 399.075   | F                             |
|          | B-AD   | 293                   | 73                      | 300               | 0.977 | 270                 | 2.1               | 8.0             | 92.541    | F                             |
|          | ABCD   | 47                    | 12                      | 1019              | 0.047 | 47                  | 0.0               | 0.1             | 4.074     | A                             |
|          | AB     | 344                   | 86                      |                   |       | 344                 |                   |                 |           |                               |
|          | AC     | 356                   | 89                      |                   |       | 356                 |                   |                 |           |                               |
|          | D-ABC  | 33                    | 8                       | 363               | 0.091 | 33                  | 0.1               | 0.1             | 11.992    | B                             |
|          | C-D    | 42                    | 10                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 560                   | 140                     |                   |       | 560                 |                   |                 |           |                               |
| 2        | C-B    | 53                    | 13                      | 456               | 0.116 | 53                  | 0.1               | 0.1             | 9.816     | A                             |
|          | B-C    | 24                    | 6                       | 132               | 0.183 | 24                  | 0.1               | 0.2             | 36.142    | E                             |
|          | B-A    | 200                   | 50                      | 230               | 0.872 | 189                 | 1.6               | 4.4             | 80.864    | F                             |
|          | C-AB   | 36                    | 9                       | 512               | 0.071 | 36                  | 0.1               | 0.1             | 8.316     | A                             |
|          | C-A    | 534                   | 133                     |                   |       | 534                 |                   |                 |           |                               |
|          | AB     | 519                   | 130                     |                   |       | 519                 |                   |                 |           |                               |
|          | AC     | 99                    | 25                      |                   |       | 99                  |                   |                 |           |                               |

## 08:00 - 08:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 20                    | 5                       | 25                | 0.793 | 18                  | 1.8               | 2.2             | 375.797   | F                             |
|          | B-AD   | 293                   | 73                      | 298               | 0.982 | 281                 | 8.0               | 11.0            | 141.329   | F                             |
|          | ABCD   | 48                    | 12                      | 1019              | 0.047 | 48                  | 0.1               | 0.1             | 4.075     | A                             |
|          | AB     | 344                   | 86                      |                   |       | 344                 |                   |                 |           |                               |
|          | AC     | 356                   | 89                      |                   |       | 356                 |                   |                 |           |                               |
|          | D-ABC  | 33                    | 8                       | 360               | 0.092 | 33                  | 0.1               | 0.1             | 12.118    | B                             |
|          | C-D    | 42                    | 10                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 560                   | 140                     |                   |       | 560                 |                   |                 |           |                               |
| 2        | C-B    | 53                    | 13                      | 456               | 0.116 | 53                  | 0.1               | 0.1             | 9.822     | A                             |
|          | B-C    | 24                    | 6                       | 82                | 0.297 | 23                  | 0.2               | 0.4             | 67.185    | F                             |
|          | B-A    | 200                   | 50                      | 230               | 0.872 | 197                 | 4.4               | 5.3             | 103.851   | F                             |
|          | C-AB   | 36                    | 9                       | 512               | 0.071 | 36                  | 0.1               | 0.1             | 8.318     | A                             |
|          | C-A    | 534                   | 133                     |                   |       | 534                 |                   |                 |           |                               |
|          | AB     | 519                   | 130                     |                   |       | 519                 |                   |                 |           |                               |
|          | AC     | 99                    | 25                      |                   |       | 99                  |                   |                 |           |                               |

## 08:15 - 08:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 15                    | 4                       | 150               | 0.099 | 23                  | 2.2               | 0.1             | 33.092    | D                             |
|          | B-AD   | 240                   | 60                      | 351               | 0.685 | 274                 | 11.0              | 2.7             | 63.221    | F                             |
|          | ABCD   | 30                    | 7                       | 940               | 0.032 | 30                  | 0.1               | 0.0             | 4.352     | A                             |
|          | AB     | 285                   | 71                      |                   |       | 285                 |                   |                 |           |                               |
|          | AC     | 295                   | 74                      |                   |       | 295                 |                   |                 |           |                               |
|          | D-ABC  | 27                    | 7                       | 412               | 0.065 | 27                  | 0.1               | 0.1             | 10.278    | B                             |
|          | C-D    | 34                    | 9                       |                   |       | 34                  |                   |                 |           |                               |
|          | C-A    | 458                   | 114                     |                   |       | 458                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 489               | 0.088 | 43                  | 0.1               | 0.1             | 8.895     | A                             |
|          | B-C    | 20                    | 5                       | 311               | 0.064 | 21                  | 0.4               | 0.1             | 13.711    | B                             |
|          | B-A    | 164                   | 41                      | 264               | 0.620 | 177                 | 5.3               | 2.0             | 50.406    | F                             |
|          | C-AB   | 30                    | 7                       | 540               | 0.055 | 30                  | 0.1               | 0.1             | 7.759     | A                             |
|          | C-A    | 436                   | 109                     |                   |       | 436                 |                   |                 |           |                               |
|          | AB     | 423                   | 106                     |                   |       | 423                 |                   |                 |           |                               |
|          | AC     | 81                    | 20                      |                   |       | 81                  |                   |                 |           |                               |

## 08:30 - 08:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 11                    | 3                       | 295               | 0.037 | 11                  | 0.1               | 0.0             | 13.987    | B                             |
|          | B-AD   | 203                   | 51                      | 391               | 0.519 | 209                 | 2.7               | 1.2             | 22.412    | C                             |
|          | ABCD   | 21                    | 5                       | 886               | 0.024 | 21                  | 0.0               | 0.0             | 4.578     | A                             |
|          | AB     | 241                   | 60                      |                   |       | 241                 |                   |                 |           |                               |
|          | AC     | 249                   | 62                      |                   |       | 249                 |                   |                 |           |                               |
|          | D-ABC  | 23                    | 6                       | 455               | 0.050 | 23                  | 0.1               | 0.1             | 9.163     | A                             |
|          | C-D    | 29                    | 7                       |                   |       | 29                  |                   |                 |           |                               |
|          | C-A    | 383                   | 96                      |                   |       | 383                 |                   |                 |           |                               |
| 2        | C-B    | 36                    | 9                       | 512               | 0.071 | 36                  | 0.1               | 0.1             | 8.322     | A                             |
|          | B-C    | 17                    | 4                       | 440               | 0.038 | 17                  | 0.1               | 0.0             | 9.364     | A                             |
|          | B-A    | 137                   | 34                      | 288               | 0.475 | 141                 | 2.0               | 1.0             | 27.466    | D                             |
|          | C-AB   | 25                    | 6                       | 560               | 0.044 | 25                  | 0.1               | 0.1             | 7.393     | A                             |
|          | C-A    | 365                   | 91                      |                   |       | 365                 |                   |                 |           |                               |
|          | AB     | 355                   | 89                      |                   |       | 355                 |                   |                 |           |                               |
|          | AC     | 68                    | 17                      |                   |       | 68                  |                   |                 |           |                               |

| Junctions 10                                                                                                                                                     |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| PICADY 10 - Priority Intersection Module                                                                                                                         |  |  |  |
| Version: 10.1.1.1905                                                                                                                                             |  |  |  |
| © Copyright TRL Software Limited, 2023                                                                                                                           |  |  |  |
| For sales and distribution information, program advice and maintenance, contact TRL Software:                                                                    |  |  |  |
| +44 (0)1344 379777 software@trl.co.uk trlsoftware.com                                                                                                            |  |  |  |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |  |  |

Filename: 2024 Base PM Adjusted.j10

Path: Z:\Documents\PARAGON HIGHWAYS\Bromley Farm Quarry\PICADY\PICADY Sovereign\PICADY custom

Report generation date: 12/14/2024 10:29:42 AM

## «2024 Base Custom, PM

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

## Summary of junction performance

|                           | PM          |           |      |     |
|---------------------------|-------------|-----------|------|-----|
|                           | Queue (PCU) | Delay (s) | RFC  | LOS |
| 2024 Base Custom          |             |           |      |     |
| Junction 1 - Stream B-CD  | 2.7         | 381.63    | 1.03 | F   |
| Junction 1 - Stream B-AD  | 12.0        | 189.01    | 1.02 | F   |
| Junction 1 - Stream A-BCD | 0.1         | 4.32      | 0.04 | A   |
| Junction 1 - Stream D-ABC | 0.1         | 10.09     | 0.10 | B   |
| Junction 1 - Stream C-B   | 0.1         | 10.07     | 0.10 | B   |
| Junction 2 - Stream B-C   | 1.7         | 370.23    | 0.90 | F   |
| Junction 2 - Stream B-A   | 8.5         | 143.83    | 0.95 | F   |
| Junction 2 - Stream C-AB  | 0.0         | 8.41      | 0.04 | A   |

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

## File summary

### File Description

|             |                                        |
|-------------|----------------------------------------|
| Title       | Bromley Farm Quarry, Upper Cumberworth |
| Location    | A629/ A635 Sovereign Crossroads        |
| Site number | 2074                                   |
| Date        | 11/19/2024                             |
| Version     | 2                                      |
| Status      |                                        |
| Identifier  |                                        |
| Client      | SE                                     |
| Jobnumber   | 2074C                                  |
| Enumerator  | AH                                     |
| Description | 2024 Base                              |

## Units

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

## Analysis Options

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

## Analysis Set Details

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

# 2024 Base Custom, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Arm D Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | Crossroads    | Two-way         | Two-way         | Two-way         | Two-way         |                       | 31.85              | D            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                 |                       | 24.34              | C            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 28.26             | D           |

## Arms

### Arms

| Junction | Arm | Name                | Description                        | Arm type |
|----------|-----|---------------------|------------------------------------|----------|
| 1        | A   | A629 Lane Head Road | South of Holmfirth Road A635 Junct | Major    |
|          | B   | A635 Holmfirth Road |                                    | Minor    |
|          | C   | A629 Lane Head Road | North of Holmfirth Road A635 Junct | Major    |
|          | D   | PFS Access          | Opposite Holmfirth Road A635 Junct | Minor    |
| 2        | A   | A629 Lane Head Road | North of Barnsley Road A635 Junct  | Major    |
|          | B   | A635 Barnsley Road  |                                    | Minor    |
|          | C   | A629 Penistone Road |                                    | Major    |

### Major Arm Geometry

| Junction | Arm | Width of carriageway (m) | Has kerbed central reserve | Has right-turn storage | Width for right-turn storage (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|----------|-----|--------------------------|----------------------------|------------------------|----------------------------------|-------------------------------|---------|----------------------|
| 1        | A   | 6.90                     |                            |                        |                                  | 120.0                         | ✓       | 0.00                 |
|          | C   | 6.90                     |                            | ✓                      | 2.40                             | 80.0                          |         | -                    |
| 2        | C   | 7.00                     |                            | ✓                      | 2.50                             | 120.0                         | ✓       | 9.00                 |

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

### Minor Arm Geometry

| Junction | Arm | Minor arm type      | Lane width (m) | 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) |
|----------|-----|---------------------|----------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| 1        | B   | One lane plus flare |                | 10.00                 | 9.50            | 5.80             | 4.40             | 3.30             |                       | 1.00               | 50                     | 131                     |
|          | D   | One lane            | 5.00           |                       |                 |                  |                  |                  |                       |                    | 56                     | 36                      |
| 2        | B   | One lane plus flare |                | 10.00                 | 9.00            | 6.30             | 4.60             | 3.80             |                       | 1.00               | 73                     | 33                      |

### Slope / Intercept / Capacity

#### Custom Intercept Adjustments

| Junction | Custom stream intercept adjustment | Stream | Use adjustment | Reason       | Direct intercept adjustment (PCU/hr) |
|----------|------------------------------------|--------|----------------|--------------|--------------------------------------|
| 1        | 1                                  | B-A    | ✓              | Queue Survey | -144                                 |
| 2        | 1                                  | B-A    | ✓              | Queue        | -119                                 |

### 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                | 643                | -             | -             | -             | -             | -             | -             | 0.240         | 0.342         | 0.240         | -             | -             | -             |
|          | B-A                | 496                | 0.112         | 0.283         | 0.283         | -             | -             | -             | 0.178         | 0.405         | -             | 0.283         | 0.283         | 0.142         |
|          | B-C                | 684                | 0.101         | 0.254         | -             | -             | -             | -             | -             | -             | -             | -             | -             | -             |
|          | B-D, nearside lane | 541                | 0.095         | 0.239         | 0.239         | -             | -             | -             | 0.150         | 0.342         | 0.150         | -             | -             | -             |
|          | B-D, offside lane  | 640                | 0.112         | 0.283         | 0.283         | -             | -             | -             | 0.178         | 0.405         | 0.178         | -             | -             | -             |
|          | C-B                | 634                | 0.236         | 0.236         | 0.337         | -             | -             | -             | -             | -             | -             | -             | -             | -             |
|          | D-A                | 776                | -             | -             | -             | -             | -             | -             | 0.289         | -             | 0.114         | -             | -             | -             |
|          | D-B, nearside lane | 616                | 0.172         | 0.172         | 0.389         | -             | -             | -             | 0.273         | 0.273         | 0.108         | -             | -             | -             |
|          | D-B, offside lane  | 616                | 0.172         | 0.172         | 0.389         | -             | -             | -             | 0.273         | 0.273         | 0.108         | -             | -             | -             |
|          | D-C                | 616                | -             | 0.172         | 0.389         | 0.136         | 0.273         | 0.273         | 0.273         | 0.273         | 0.108         | -             | -             | -             |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 2        | B-A    | 483                | 0.105         | 0.265         | 0.167         | 0.378         |
|          | B-C    | 622                | 0.091         | 0.231         | -             | -             |
|          | C-B    | 664                | 0.246         | 0.246         | -             | -             |

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

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

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name    | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2024 Base Custom | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 756                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 236                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 521                     | 100.000            |
|          | D   |            | ONE HOUR     | ✓            | 39                      | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 649                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 218                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 557                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      |   | To  |     |     |    |
|------|---|-----|-----|-----|----|
|      |   | A   | B   | C   | D  |
| From | A | 0   | 467 | 278 | 11 |
|      | B | 214 | 0   | 4   | 18 |
|      | C | 435 | 39  | 0   | 47 |
|      | D | 18  | 10  | 11  | 0  |

### Demand (PCU/hr)

#### Junction 2

|      | To |     |     |     |
|------|----|-----|-----|-----|
|      |    | A   | B   | C   |
| From | A  | 0   | 278 | 371 |
|      | B  | 204 | 0   | 14  |
|      | C  | 541 | 16  | 0   |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|      | To |    |    |    |    |
|------|----|----|----|----|----|
|      |    | A  | B  | C  | D  |
| From | A  | 10 | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 | 10 |
|      | D  | 10 | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|      | To |    |    |    |
|------|----|----|----|----|
| From |    | A  | B  | C  |
|      | A  | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-CD   | 1.03    | 381.63        | 2.7             | F       | 19                      | 28                            |
|          | B-AD   | 1.02    | 189.01        | 12.0            | F       | 198                     | 297                           |
|          | A-BCD  | 0.04    | 4.32          | 0.1             | A       | 33                      | 50                            |
|          | A-B    |         |               |                 |         | 414                     | 621                           |
|          | A-C    |         |               |                 |         | 247                     | 370                           |
|          | D-ABC  | 0.10    | 10.09         | 0.1             | B       | 36                      | 54                            |
|          | C-D    |         |               |                 |         | 43                      | 65                            |
|          | C-A    |         |               |                 |         | 399                     | 599                           |
| 2        | C-B    | 0.10    | 10.07         | 0.1             | B       | 36                      | 54                            |
|          | B-C    | 0.90    | 370.23        | 1.7             | F       | 13                      | 19                            |
|          | B-A    | 0.95    | 143.83        | 8.5             | F       | 187                     | 281                           |
|          | C-AB   | 0.04    | 8.41          | 0.0             | A       | 15                      | 22                            |
|          | C-A    |         |               |                 |         | 496                     | 745                           |
|          | A-B    |         |               |                 |         | 255                     | 383                           |
|          | A-C    |         |               |                 |         | 340                     | 511                           |

## Main Results for each time segment

### 16:30 - 16:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 13                    | 3                       | 319               | 0.041 | 13                  | 0.0               | 0.0             | 12.931    | B                             |
|          | B-AD   | 164                   | 41                      | 320               | 0.514 | 160                 | 0.0               | 1.1             | 24.192    | C                             |
|          | ABCD   | 21                    | 5                       | 937               | 0.022 | 21                  | 0.0               | 0.0             | 4.320     | A                             |
|          | AB     | 344                   | 86                      |                   |       | 344                 |                   |                 |           |                               |
|          | AC     | 205                   | 51                      |                   |       | 205                 |                   |                 |           |                               |
|          | D-ABC  | 29                    | 7                       | 519               | 0.057 | 29                  | 0.0               | 0.1             | 8.072     | A                             |
|          | C-D    | 35                    | 9                       |                   |       | 35                  |                   |                 |           |                               |
|          | C-A    | 327                   | 82                      |                   |       | 327                 |                   |                 |           |                               |
| 2        | C-B    | 29                    | 7                       | 499               | 0.059 | 29                  | 0.0               | 0.1             | 8.429     | A                             |
|          | B-C    | 11                    | 3                       | 416               | 0.025 | 10                  | 0.0               | 0.0             | 9.760     | A                             |
|          | B-A    | 154                   | 38                      | 314               | 0.489 | 150                 | 0.0               | 1.0             | 23.553    | C                             |
|          | C-AB   | 12                    | 3                       | 544               | 0.022 | 12                  | 0.0               | 0.0             | 7.441     | A                             |
|          | C-A    | 407                   | 102                     |                   |       | 407                 |                   |                 |           |                               |
|          | AB     | 209                   | 52                      |                   |       | 209                 |                   |                 |           |                               |
|          | AC     | 279                   | 70                      |                   |       | 279                 |                   |                 |           |                               |

### 16:45 - 17:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 17                    | 4                       | 215               | 0.080 | 17                  | 0.0               | 0.1             | 19.975    | C                             |
|          | B-AD   | 195                   | 49                      | 284               | 0.687 | 191                 | 1.1               | 2.1             | 40.834    | E                             |
|          | ABCD   | 30                    | 7                       | 1001              | 0.030 | 30                  | 0.0               | 0.0             | 4.077     | A                             |
|          | AB     | 407                   | 102                     |                   |       | 407                 |                   |                 |           |                               |
|          | AC     | 242                   | 61                      |                   |       | 242                 |                   |                 |           |                               |
|          | D-ABC  | 35                    | 9                       | 486               | 0.072 | 35                  | 0.1               | 0.1             | 8.785     | A                             |
|          | C-D    | 42                    | 11                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 391                   | 98                      |                   |       | 391                 |                   |                 |           |                               |
| 2        | C-B    | 35                    | 9                       | 472               | 0.074 | 35                  | 0.1               | 0.1             | 9.052     | A                             |
|          | B-C    | 13                    | 3                       | 307               | 0.041 | 13                  | 0.0               | 0.0             | 13.443    | B                             |
|          | B-A    | 183                   | 46                      | 281               | 0.652 | 180                 | 1.0               | 1.9             | 37.816    | E                             |
|          | C-AB   | 14                    | 4                       | 521               | 0.028 | 14                  | 0.0               | 0.0             | 7.819     | A                             |
|          | C-A    | 486                   | 122                     |                   |       | 486                 |                   |                 |           |                               |
|          | AB     | 250                   | 62                      |                   |       | 250                 |                   |                 |           |                               |
|          | AC     | 334                   | 83                      |                   |       | 334                 |                   |                 |           |                               |

### 17:00 - 17:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 24                    | 6                       | 23                | 1.031 | 16                  | 0.1               | 2.2             | 374.850   | F                             |
|          | B-AD   | 236                   | 59                      | 233               | 1.011 | 211                 | 2.1               | 8.3             | 119.050   | F                             |
|          | ABCD   | 49                    | 12                      | 1093              | 0.045 | 49                  | 0.0               | 0.1             | 3.789     | A                             |
|          | AB     | 491                   | 123                     |                   |       | 491                 |                   |                 |           |                               |
|          | AC     | 292                   | 73                      |                   |       | 292                 |                   |                 |           |                               |
|          | D-ABC  | 43                    | 11                      | 438               | 0.098 | 43                  | 0.1               | 0.1             | 10.024    | B                             |
|          | C-D    | 52                    | 13                      |                   |       | 52                  |                   |                 |           |                               |
|          | C-A    | 479                   | 120                     |                   |       | 479                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 436               | 0.098 | 43                  | 0.1               | 0.1             | 10.065    | B                             |
|          | B-C    | 15                    | 4                       | 32                | 0.477 | 13                  | 0.0               | 0.7             | 187.015   | F                             |
|          | B-A    | 225                   | 56                      | 236               | 0.953 | 206                 | 1.9               | 6.4             | 99.616    | F                             |
|          | C-AB   | 18                    | 4                       | 489               | 0.036 | 18                  | 0.0               | 0.0             | 8.409     | A                             |
|          | C-A    | 596                   | 149                     |                   |       | 596                 |                   |                 |           |                               |
|          | AB     | 306                   | 77                      |                   |       | 306                 |                   |                 |           |                               |
|          | AC     | 408                   | 102                     |                   |       | 408                 |                   |                 |           |                               |

## 17:15 - 17:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 24                    | 6                       | 28                | 0.853 | 22                  | 2.2               | 2.7             | 381.630   | F                             |
|          | B-AD   | 236                   | 59                      | 232               | 1.018 | 220                 | 8.3               | 12.0            | 189.008   | F                             |
|          | ABCD   | 49                    | 12                      | 1093              | 0.045 | 49                  | 0.1               | 0.1             | 3.790     | A                             |
|          | AB     | 491                   | 123                     |                   |       | 491                 |                   |                 |           |                               |
|          | AC     | 292                   | 73                      |                   |       | 292                 |                   |                 |           |                               |
|          | D-ABC  | 43                    | 11                      | 435               | 0.099 | 43                  | 0.1               | 0.1             | 10.088    | B                             |
|          | C-D    | 52                    | 13                      |                   |       | 52                  |                   |                 |           |                               |
|          | C-A    | 479                   | 120                     |                   |       | 479                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 436               | 0.098 | 43                  | 0.1               | 0.1             | 10.071    | B                             |
|          | B-C    | 15                    | 4                       | 17                | 0.898 | 12                  | 0.7               | 1.7             | 370.230   | F                             |
|          | B-A    | 225                   | 56                      | 236               | 0.954 | 216                 | 6.4               | 8.5             | 143.832   | F                             |
|          | C-AB   | 18                    | 4                       | 489               | 0.036 | 18                  | 0.0               | 0.0             | 8.409     | A                             |
|          | C-A    | 596                   | 149                     |                   |       | 596                 |                   |                 |           |                               |
|          | AB     | 306                   | 77                      |                   |       | 306                 |                   |                 |           |                               |
|          | AC     | 408                   | 102                     |                   |       | 408                 |                   |                 |           |                               |

## 17:30 - 17:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 19                    | 5                       | 127               | 0.147 | 29                  | 2.7               | 0.2             | 43.887    | E                             |
|          | B-AD   | 194                   | 48                      | 280               | 0.691 | 230                 | 12.0              | 3.0             | 95.938    | F                             |
|          | ABCD   | 30                    | 8                       | 1001              | 0.030 | 30                  | 0.1               | 0.0             | 4.080     | A                             |
|          | AB     | 407                   | 102                     |                   |       | 407                 |                   |                 |           |                               |
|          | AC     | 242                   | 61                      |                   |       | 242                 |                   |                 |           |                               |
|          | D-ABC  | 35                    | 9                       | 482               | 0.073 | 35                  | 0.1               | 0.1             | 8.863     | A                             |
|          | C-D    | 42                    | 11                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 391                   | 98                      |                   |       | 391                 |                   |                 |           |                               |
| 2        | C-B    | 35                    | 9                       | 472               | 0.074 | 35                  | 0.1               | 0.1             | 9.060     | A                             |
|          | B-C    | 13                    | 3                       | 232               | 0.054 | 19                  | 1.7               | 0.1             | 19.140    | C                             |
|          | B-A    | 183                   | 46                      | 280               | 0.654 | 208                 | 8.5               | 2.4             | 64.946    | F                             |
|          | C-AB   | 14                    | 4                       | 521               | 0.028 | 14                  | 0.0               | 0.0             | 7.822     | A                             |
|          | C-A    | 486                   | 122                     |                   |       | 486                 |                   |                 |           |                               |
|          | AB     | 250                   | 62                      |                   |       | 250                 |                   |                 |           |                               |
|          | AC     | 334                   | 83                      |                   |       | 334                 |                   |                 |           |                               |

## 17:45 - 18:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 13                    | 3                       | 304               | 0.044 | 14                  | 0.2               | 0.1             | 13.694    | B                             |
|          | B-AD   | 164                   | 41                      | 319               | 0.514 | 171                 | 3.0               | 1.2             | 27.823    | D                             |
|          | ABCD   | 21                    | 5                       | 937               | 0.022 | 21                  | 0.0               | 0.0             | 4.323     | A                             |
|          | AB     | 344                   | 86                      |                   |       | 344                 |                   |                 |           |                               |
|          | AC     | 205                   | 51                      |                   |       | 205                 |                   |                 |           |                               |
|          | D-ABC  | 29                    | 7                       | 519               | 0.057 | 29                  | 0.1               | 0.1             | 8.098     | A                             |
|          | C-D    | 35                    | 9                       |                   |       | 35                  |                   |                 |           |                               |
|          | C-A    | 327                   | 82                      |                   |       | 327                 |                   |                 |           |                               |
| 2        | C-B    | 29                    | 7                       | 499               | 0.059 | 29                  | 0.1               | 0.1             | 8.443     | A                             |
|          | B-C    | 11                    | 3                       | 402               | 0.026 | 11                  | 0.1               | 0.0             | 10.133    | B                             |
|          | B-A    | 154                   | 38                      | 314               | 0.489 | 159                 | 2.4               | 1.1             | 26.222    | D                             |
|          | C-AB   | 12                    | 3                       | 544               | 0.022 | 12                  | 0.0               | 0.0             | 7.444     | A                             |
|          | C-A    | 407                   | 102                     |                   |       | 407                 |                   |                 |           |                               |
|          | AB     | 209                   | 52                      |                   |       | 209                 |                   |                 |           |                               |
|          | AC     | 279                   | 70                      |                   |       | 279                 |                   |                 |           |                               |

| Junctions 10                                                                                                                                                     |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| PICADY 10 - Priority Intersection Module                                                                                                                         |  |  |  |
| Version: 10.1.1.1905                                                                                                                                             |  |  |  |
| © Copyright TRL Software Limited, 2023                                                                                                                           |  |  |  |
| For sales and distribution information, program advice and maintenance, contact TRL Software:                                                                    |  |  |  |
| +44 (0)1344 379777 software@trl.co.uk trlsoftware.com                                                                                                            |  |  |  |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |  |  |

**Filename:** 2024 With Quarry Traffic Custom AM.j10

**Path:** Z:\Documents\PARAGON HIGHWAYS\Bromley Farm Quarry\PICADY\PICADY Sovereign\PICADY custom

**Report generation date:** 1/8/2025 9:42:31 AM

## «2024 + DEV Custom, AM

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

## Summary of junction performance

|                           | AM                |           |      |     |
|---------------------------|-------------------|-----------|------|-----|
|                           | Queue (PCU)       | Delay (s) | RFC  | LOS |
|                           | 2024 + DEV Custom |           |      |     |
| Junction 1 - Stream B-CD  | 2.4               | 431.09    | 1.05 | F   |
| Junction 1 - Stream B-AD  | 15.8              | 185.54    | 1.04 | F   |
| Junction 1 - Stream A-BCD | 0.1               | 4.54      | 0.05 | A   |
| Junction 1 - Stream D-ABC | 0.1               | 12.24     | 0.09 | B   |
| Junction 1 - Stream C-B   | 0.1               | 9.91      | 0.12 | A   |
| Junction 2 - Stream B-C   | 2.2               | 310.62    | 0.92 | F   |
| Junction 2 - Stream B-A   | 8.0               | 142.89    | 0.95 | F   |
| Junction 2 - Stream C-AB  | 0.1               | 8.38      | 0.07 | A   |

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

## File summary

### File Description

|                    |                                        |
|--------------------|----------------------------------------|
| <b>Title</b>       | Bromley Farm Quarry, Upper Cumberworth |
| <b>Location</b>    | A629/ A635 Sovereign Crossroads        |
| <b>Site number</b> | 2074                                   |
| <b>Date</b>        | 8/1/2025                               |
| <b>Version</b>     | 2                                      |
| <b>Status</b>      |                                        |
| <b>Identifier</b>  |                                        |
| <b>Client</b>      | SE                                     |
| <b>Jobnumber</b>   | 2074C                                  |
| <b>Enumerator</b>  | LO                                     |
| <b>Description</b> | 2024 With Quarry Traffic AM            |

## Units

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

## Analysis Options

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

## Analysis Set Details

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

# 2024 + DEV Custom, AM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Arm D Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | Crossroads    | Two-way         | Two-way         | Two-way         | Two-way         |                       | 37.37              | E            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                 |                       | 26.79              | D            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 32.63             | D           |

## Arms

### Arms

| Junction | Arm | Name                | Description                        | Arm type |
|----------|-----|---------------------|------------------------------------|----------|
| 1        | A   | A629 Lane Head Road | South of Holmfirth Road A635 Junct | Major    |
|          | B   | A635 Holmfirth Road |                                    | Minor    |
|          | C   | A629 Lane Head Road | North of Holmfirth Road A635 Junct | Major    |
|          | D   | PFS Access          | Opposite Holmfirth Road A635 Junct | Minor    |
| 2        | A   | A629 Lane Head Road | North of Barnsley Road A635 Junct  | Major    |
|          | B   | A635 Barnsley Road  |                                    | Minor    |
|          | C   | A629 Penistone Road |                                    | Major    |

### Major Arm Geometry

| Junction | Arm | Width of carriageway (m) | Has kerbed central reserve | Has right-turn storage | Width for right-turn storage (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|----------|-----|--------------------------|----------------------------|------------------------|----------------------------------|-------------------------------|---------|----------------------|
| 1        | A   | 6.90                     |                            |                        |                                  | 120.0                         | ✓       | 0.00                 |
|          | C   | 6.90                     |                            | ✓                      | 2.40                             | 80.0                          |         | -                    |
| 2        | C   | 7.00                     |                            | ✓                      | 2.50                             | 120.0                         | ✓       | 9.00                 |

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

### Minor Arm Geometry

| Junction | Arm | Minor arm type      | Lane width (m) | 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) |
|----------|-----|---------------------|----------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| 1        | B   | One lane plus flare |                | 10.00                 | 9.50            | 5.80             | 4.40             | 3.30             |                       | 1.00               | 50                     | 131                     |
|          | D   | One lane            | 5.00           |                       |                 |                  |                  |                  |                       |                    | 56                     | 36                      |
| 2        | B   | One lane plus flare |                | 10.00                 | 9.00            | 6.30             | 4.60             | 3.80             |                       | 1.00               | 73                     | 33                      |

### Slope / Intercept / Capacity

#### Custom Intercept Adjustments

| Junction | Custom stream intercept adjustment | Stream | Use adjustment | Reason       | Direct intercept adjustment (PCU/hr) |
|----------|------------------------------------|--------|----------------|--------------|--------------------------------------|
| 1        | 1                                  | B-A    | ✓              | Queue Survey | -61                                  |
| 2        | 1                                  | B-A    | ✓              | Queue        | -186                                 |

### 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                | 643                | -             | -             | -             | -             | -             | -             | 0.240         | 0.342         | 0.240         | -             | -             | -             |
|          | B-A                | 582                | 0.112         | 0.284         | 0.284         | -             | -             | -             | 0.179         | 0.406         | -             | 0.284         | 0.284         | 0.142         |
|          | B-C                | 681                | 0.100         | 0.254         | -             | -             | -             | -             | -             | -             | -             | -             | -             | -             |
|          | B-D, nearside lane | 539                | 0.094         | 0.238         | 0.238         | -             | -             | -             | 0.150         | 0.340         | 0.150         | -             | -             | -             |
|          | B-D, offside lane  | 642                | 0.112         | 0.284         | 0.284         | -             | -             | -             | 0.179         | 0.406         | 0.179         | -             | -             | -             |
|          | C-B                | 634                | 0.236         | 0.236         | 0.337         | -             | -             | -             | -             | -             | -             | -             | -             | -             |
|          | D-A                | 776                | -             | -             | -             | -             | -             | -             | 0.289         | -             | 0.114         | -             | -             | -             |
|          | D-B, nearside lane | 616                | 0.172         | 0.172         | 0.389         | -             | -             | -             | 0.273         | 0.273         | 0.108         | -             | -             | -             |
|          | D-B, offside lane  | 616                | 0.172         | 0.172         | 0.389         | -             | -             | -             | 0.273         | 0.273         | 0.108         | -             | -             | -             |
|          | D-C                | 616                | -             | 0.172         | 0.389         | 0.136         | 0.273         | 0.273         | 0.273         | 0.273         | 0.108         | -             | -             | -             |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 2        | B-A    | 414                | 0.104         | 0.264         | 0.166         | 0.377         |
|          | B-C    | 625                | 0.092         | 0.232         | -             | -             |
|          | C-B    | 664                | 0.246         | 0.246         | -             | -             |

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

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

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name     | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|-------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2024 + DEV Custom | AM               | ONE HOUR             | 07:15              | 08:45               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 693                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 298                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 595                     | 100.000            |
|          | D   |            | ONE HOUR     | ✓            | 30                      | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 575                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 218                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 518                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      |   | To  |     |     |    |
|------|---|-----|-----|-----|----|
|      |   | A   | B   | C   | D  |
| From | A | 0   | 342 | 339 | 12 |
|      | B | 280 | 0   | 3   | 15 |
|      | C | 509 | 48  | 0   | 38 |
|      | D | 7   | 8   | 15  | 0  |

### Demand (PCU/hr)

#### Junction 2

|      | To |     |     |    |
|------|----|-----|-----|----|
|      |    | A   | B   | C  |
| From | A  | 0   | 485 | 90 |
|      | B  | 196 | 0   | 22 |
|      | C  | 485 | 33  | 0  |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|      | To |    |    |    |    |
|------|----|----|----|----|----|
|      |    | A  | B  | C  | D  |
| From | A  | 10 | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 | 10 |
|      | D  | 10 | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|      | To |    |    |    |
|------|----|----|----|----|
| From |    | A  | B  | C  |
|      | A  | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-CD   | 1.05    | 431.09        | 2.4             | F       | 15                      | 23                            |
|          | B-AD   | 1.04    | 185.54        | 15.8            | F       | 258                     | 387                           |
|          | A-BCD  | 0.05    | 4.54          | 0.1             | A       | 33                      | 50                            |
|          | A-B    |         |               |                 |         | 303                     | 454                           |
|          | A-C    |         |               |                 |         | 300                     | 450                           |
|          | D-ABC  | 0.09    | 12.24         | 0.1             | B       | 28                      | 41                            |
|          | C-D    |         |               |                 |         | 35                      | 52                            |
|          | C-A    |         |               |                 |         | 467                     | 701                           |
| 2        | C-B    | 0.12    | 9.91          | 0.1             | A       | 44                      | 66                            |
|          | B-C    | 0.92    | 310.62        | 2.2             | F       | 20                      | 30                            |
|          | B-A    | 0.95    | 142.89        | 8.0             | F       | 180                     | 270                           |
|          | C-AB   | 0.07    | 8.38          | 0.1             | A       | 30                      | 45                            |
|          | C-A    |         |               |                 |         | 445                     | 668                           |
|          | A-B    |         |               |                 |         | 445                     | 668                           |
|          | A-C    |         |               |                 |         | 83                      | 124                           |

## Main Results for each time segment

### 07:15 - 07:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 11                    | 3                       | 294               | 0.037 | 11                  | 0.0               | 0.0             | 13.976    | B                             |
|          | B-AD   | 213                   | 53                      | 390               | 0.547 | 208                 | 0.0               | 1.3             | 21.265    | C                             |
|          | ABCD   | 21                    | 5                       | 893               | 0.024 | 21                  | 0.0               | 0.0             | 4.539     | A                             |
|          | AB     | 251                   | 63                      |                   |       | 251                 |                   |                 |           |                               |
|          | AC     | 249                   | 62                      |                   |       | 249                 |                   |                 |           |                               |
|          | D-ABC  | 23                    | 6                       | 455               | 0.050 | 22                  | 0.0               | 0.1             | 9.156     | A                             |
|          | C-D    | 29                    | 7                       |                   |       | 29                  |                   |                 |           |                               |
|          | C-A    | 383                   | 96                      |                   |       | 383                 |                   |                 |           |                               |
| 2        | C-B    | 36                    | 9                       | 510               | 0.071 | 36                  | 0.0               | 0.1             | 8.349     | A                             |
|          | B-C    | 17                    | 4                       | 433               | 0.038 | 16                  | 0.0               | 0.0             | 9.490     | A                             |
|          | B-A    | 148                   | 37                      | 287               | 0.513 | 143                 | 0.0               | 1.1             | 26.724    | D                             |
|          | C-AB   | 25                    | 6                       | 558               | 0.045 | 25                  | 0.0               | 0.1             | 7.425     | A                             |
|          | C-A    | 365                   | 91                      |                   |       | 365                 |                   |                 |           |                               |
|          | AB     | 365                   | 91                      |                   |       | 365                 |                   |                 |           |                               |
|          | AC     | 68                    | 17                      |                   |       | 68                  |                   |                 |           |                               |

### 07:30 - 07:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 14                    | 4                       | 188               | 0.076 | 14                  | 0.0               | 0.1             | 22.802    | C                             |
|          | B-AD   | 254                   | 63                      | 352               | 0.721 | 249                 | 1.3               | 2.5             | 36.656    | E                             |
|          | ABCD   | 30                    | 8                       | 949               | 0.032 | 30                  | 0.0               | 0.0             | 4.309     | A                             |
|          | AB     | 298                   | 74                      |                   |       | 298                 |                   |                 |           |                               |
|          | AC     | 295                   | 74                      |                   |       | 295                 |                   |                 |           |                               |
|          | D-ABC  | 27                    | 7                       | 415               | 0.065 | 27                  | 0.1               | 0.1             | 10.188    | B                             |
|          | C-D    | 34                    | 9                       |                   |       | 34                  |                   |                 |           |                               |
|          | C-A    | 458                   | 114                     |                   |       | 458                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 486               | 0.089 | 43                  | 0.1               | 0.1             | 8.944     | A                             |
|          | B-C    | 20                    | 5                       | 320               | 0.062 | 20                  | 0.0               | 0.1             | 13.187    | B                             |
|          | B-A    | 176                   | 44                      | 263               | 0.671 | 173                 | 1.1               | 2.0             | 42.259    | E                             |
|          | C-AB   | 30                    | 7                       | 537               | 0.055 | 30                  | 0.1               | 0.1             | 7.801     | A                             |
|          | C-A    | 436                   | 109                     |                   |       | 436                 |                   |                 |           |                               |
|          | AB     | 436                   | 109                     |                   |       | 436                 |                   |                 |           |                               |
|          | AC     | 81                    | 20                      |                   |       | 81                  |                   |                 |           |                               |

### 07:45 - 08:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 20                    | 5                       | 19                | 1.047 | 12                  | 0.1               | 2.0             | 431.089   | F                             |
|          | B-AD   | 308                   | 77                      | 299               | 1.033 | 276                 | 2.5               | 10.5            | 111.673   | F                             |
|          | ABCD   | 49                    | 12                      | 1030              | 0.047 | 49                  | 0.0               | 0.1             | 4.033     | A                             |
|          | AB     | 359                   | 90                      |                   |       | 359                 |                   |                 |           |                               |
|          | AC     | 356                   | 89                      |                   |       | 356                 |                   |                 |           |                               |
|          | D-ABC  | 33                    | 8                       | 361               | 0.092 | 33                  | 0.1               | 0.1             | 12.078    | B                             |
|          | C-D    | 42                    | 10                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 560                   | 140                     |                   |       | 560                 |                   |                 |           |                               |
| 2        | C-B    | 53                    | 13                      | 452               | 0.117 | 53                  | 0.1               | 0.1             | 9.908     | A                             |
|          | B-C    | 24                    | 6                       | 48                | 0.508 | 21                  | 0.1               | 0.9             | 138.009   | F                             |
|          | B-A    | 216                   | 54                      | 228               | 0.945 | 199                 | 2.0               | 6.1             | 101.000   | F                             |
|          | C-AB   | 36                    | 9                       | 509               | 0.071 | 36                  | 0.1               | 0.1             | 8.383     | A                             |
|          | C-A    | 534                   | 133                     |                   |       | 534                 |                   |                 |           |                               |
|          | AB     | 534                   | 133                     |                   |       | 534                 |                   |                 |           |                               |
|          | AC     | 99                    | 25                      |                   |       | 99                  |                   |                 |           |                               |

## 08:00 - 08:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 20                    | 5                       | 23                | 0.845 | 18                  | 2.0               | 2.4             | 421.562   | F                             |
|          | B-AD   | 308                   | 77                      | 297               | 1.038 | 287                 | 10.5              | 15.8            | 185.540   | F                             |
|          | ABCD   | 49                    | 12                      | 1031              | 0.047 | 49                  | 0.1               | 0.1             | 4.035     | A                             |
|          | AB     | 359                   | 90                      |                   |       | 359                 |                   |                 |           |                               |
|          | AC     | 356                   | 89                      |                   |       | 356                 |                   |                 |           |                               |
|          | D-ABC  | 33                    | 8                       | 357               | 0.093 | 33                  | 0.1               | 0.1             | 12.236    | B                             |
|          | C-D    | 42                    | 10                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 560                   | 140                     |                   |       | 560                 |                   |                 |           |                               |
| 2        | C-B    | 53                    | 13                      | 452               | 0.117 | 53                  | 0.1               | 0.1             | 9.912     | A                             |
|          | B-C    | 24                    | 6                       | 26                | 0.924 | 19                  | 0.9               | 2.2             | 310.619   | F                             |
|          | B-A    | 216                   | 54                      | 228               | 0.946 | 208                 | 6.1               | 8.0             | 142.886   | F                             |
|          | C-AB   | 36                    | 9                       | 509               | 0.071 | 36                  | 0.1               | 0.1             | 8.385     | A                             |
|          | C-A    | 534                   | 133                     |                   |       | 534                 |                   |                 |           |                               |
|          | AB     | 534                   | 133                     |                   |       | 534                 |                   |                 |           |                               |
|          | AC     | 99                    | 25                      |                   |       | 99                  |                   |                 |           |                               |

## 08:15 - 08:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 15                    | 4                       | 92                | 0.168 | 24                  | 2.4               | 0.2             | 64.294    | F                             |
|          | B-AD   | 252                   | 63                      | 349               | 0.724 | 301                 | 15.8              | 3.5             | 100.684   | F                             |
|          | ABCD   | 31                    | 8                       | 949               | 0.032 | 31                  | 0.1               | 0.0             | 4.312     | A                             |
|          | AB     | 298                   | 74                      |                   |       | 298                 |                   |                 |           |                               |
|          | AC     | 295                   | 74                      |                   |       | 295                 |                   |                 |           |                               |
|          | D-ABC  | 27                    | 7                       | 409               | 0.066 | 27                  | 0.1               | 0.1             | 10.375    | B                             |
|          | C-D    | 34                    | 9                       |                   |       | 34                  |                   |                 |           |                               |
|          | C-A    | 458                   | 114                     |                   |       | 458                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 486               | 0.089 | 43                  | 0.1               | 0.1             | 8.956     | A                             |
|          | B-C    | 20                    | 5                       | 236               | 0.084 | 28                  | 2.2               | 0.1             | 19.737    | C                             |
|          | B-A    | 176                   | 44                      | 261               | 0.674 | 198                 | 8.0               | 2.6             | 72.667    | F                             |
|          | C-AB   | 30                    | 7                       | 537               | 0.055 | 30                  | 0.1               | 0.1             | 7.806     | A                             |
|          | C-A    | 436                   | 109                     |                   |       | 436                 |                   |                 |           |                               |
|          | AB     | 436                   | 109                     |                   |       | 436                 |                   |                 |           |                               |
|          | AC     | 81                    | 20                      |                   |       | 81                  |                   |                 |           |                               |

## 08:30 - 08:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 11                    | 3                       | 278               | 0.040 | 12                  | 0.2               | 0.0             | 14.900    | B                             |
|          | B-AD   | 213                   | 53                      | 390               | 0.547 | 222                 | 3.5               | 1.4             | 24.673    | C                             |
|          | ABCD   | 21                    | 5                       | 893               | 0.024 | 21                  | 0.0               | 0.0             | 4.540     | A                             |
|          | AB     | 251                   | 63                      |                   |       | 251                 |                   |                 |           |                               |
|          | AC     | 249                   | 62                      |                   |       | 249                 |                   |                 |           |                               |
|          | D-ABC  | 23                    | 6                       | 453               | 0.050 | 23                  | 0.1               | 0.1             | 9.201     | A                             |
|          | C-D    | 29                    | 7                       |                   |       | 29                  |                   |                 |           |                               |
|          | C-A    | 383                   | 96                      |                   |       | 383                 |                   |                 |           |                               |
| 2        | C-B    | 36                    | 9                       | 510               | 0.071 | 36                  | 0.1               | 0.1             | 8.366     | A                             |
|          | B-C    | 17                    | 4                       | 414               | 0.040 | 17                  | 0.1               | 0.0             | 9.984     | A                             |
|          | B-A    | 148                   | 37                      | 287               | 0.513 | 153                 | 2.6               | 1.2             | 30.569    | D                             |
|          | C-AB   | 25                    | 6                       | 558               | 0.045 | 25                  | 0.1               | 0.1             | 7.432     | A                             |
|          | C-A    | 365                   | 91                      |                   |       | 365                 |                   |                 |           |                               |
|          | AB     | 365                   | 91                      |                   |       | 365                 |                   |                 |           |                               |
|          | AC     | 68                    | 17                      |                   |       | 68                  |                   |                 |           |                               |

| Junctions 10                                                                                                                                                     |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| PICADY 10 - Priority Intersection Module                                                                                                                         |  |  |  |
| Version: 10.1.1.1905                                                                                                                                             |  |  |  |
| © Copyright TRL Software Limited, 2023                                                                                                                           |  |  |  |
| For sales and distribution information, program advice and maintenance, contact TRL Software:                                                                    |  |  |  |
| +44 (0)1344 379777    software@trl.co.uk    trlsoftware.com                                                                                                      |  |  |  |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |  |  |

**Filename:** 2024 With Quarry Traffic Custom PM.j10

**Path:** Z:\Documents\PARAGON HIGHWAYS\Bromley Farm Quarry\PICADY\PICADY Sovereign\PICADY custom

**Report generation date:** 1/8/2025 9:48:17 AM

## «2024 + DEV Custom, PM

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

## Summary of junction performance

|                           | PM                |           |      |     |
|---------------------------|-------------------|-----------|------|-----|
|                           | Queue (PCU)       | Delay (s) | RFC  | LOS |
|                           | 2024 + DEV Custom |           |      |     |
| Junction 1 - Stream B-CD  | 3.1               | 516.90    | 1.11 | F   |
| Junction 1 - Stream B-AD  | 17.7              | 253.41    | 1.09 | F   |
| Junction 1 - Stream A-BCD | 0.1               | 4.29      | 0.05 | A   |
| Junction 1 - Stream D-ABC | 0.1               | 10.16     | 0.10 | B   |
| Junction 1 - Stream C-B   | 0.1               | 10.17     | 0.10 | B   |
| Junction 2 - Stream B-C   | 2.1               | 497.66    | 1.05 | F   |
| Junction 2 - Stream B-A   | 12.9              | 198.03    | 1.03 | F   |
| Junction 2 - Stream C-AB  | 0.0               | 8.48      | 0.04 | A   |

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

## File summary

### File Description

|                    |                                        |
|--------------------|----------------------------------------|
| <b>Title</b>       | Bromley Farm Quarry, Upper Cumberworth |
| <b>Location</b>    | A629/ A635 Sovereign Crossroads        |
| <b>Site number</b> | 2074                                   |
| <b>Date</b>        | 8/1/2024                               |
| <b>Version</b>     | 2                                      |
| <b>Status</b>      |                                        |
| <b>Identifier</b>  |                                        |
| <b>Client</b>      | SE                                     |
| <b>Jobnumber</b>   | 2074C                                  |
| <b>Enumerator</b>  | LO                                     |
| <b>Description</b> | 2024 With Quarry Traffic PM Custom     |

## Units

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

## Analysis Options

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

## Analysis Set Details

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

# 2024 + DEV Custom, PM

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Arm D Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | Crossroads    | Two-way         | Two-way         | Two-way         | Two-way         |                       | 44.12              | E            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                 |                       | 34.62              | D            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 39.57             | E           |

## Arms

### Arms

| Junction | Arm | Name                | Description                        | Arm type |
|----------|-----|---------------------|------------------------------------|----------|
| 1        | A   | A629 Lane Head Road | South of Holmfirth Road A635 Junct | Major    |
|          | B   | A635 Holmfirth Road |                                    | Minor    |
|          | C   | A629 Lane Head Road | North of Holmfirth Road A635 Junct | Major    |
|          | D   | PFS Access          | Opposite Holmfirth Road A635 Junct | Minor    |
| 2        | A   | A629 Lane Head Road | North of Barnsley Road A635 Junct  | Major    |
|          | B   | A635 Barnsley Road  |                                    | Minor    |
|          | C   | A629 Penistone Road |                                    | Major    |

### Major Arm Geometry

| Junction | Arm | Width of carriageway (m) | Has kerbed central reserve | Has right-turn storage | Width for right-turn storage (m) | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|----------|-----|--------------------------|----------------------------|------------------------|----------------------------------|-------------------------------|---------|----------------------|
| 1        | A   | 6.90                     |                            |                        |                                  | 120.0                         | ✓       | 0.00                 |
|          | C   | 6.90                     |                            | ✓                      | 2.40                             | 80.0                          |         | -                    |
| 2        | C   | 7.00                     |                            | ✓                      | 2.50                             | 120.0                         | ✓       | 9.00                 |

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

### Minor Arm Geometry

| Junction | Arm | Minor arm type      | Lane width (m) | 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) |
|----------|-----|---------------------|----------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| 1        | B   | One lane plus flare |                | 10.00                 | 9.50            | 5.80             | 4.40             | 3.30             |                       | 1.00               | 50                     | 131                     |
|          | D   | One lane            | 5.00           |                       |                 |                  |                  |                  |                       |                    | 56                     | 36                      |
| 2        | B   | One lane plus flare |                | 10.00                 | 9.00            | 6.30             | 4.60             | 3.80             |                       | 1.00               | 73                     | 33                      |

### Slope / Intercept / Capacity

#### Custom Intercept Adjustments

| Junction | Custom stream intercept adjustment | Stream | Use adjustment | Reason       | Direct intercept adjustment (PCU/hr) |
|----------|------------------------------------|--------|----------------|--------------|--------------------------------------|
| 1        | 1                                  | B-A    | ✓              | Queue Survey | -144                                 |
| 2        | 1                                  | B-A    | ✓              | Queue        | -119                                 |

### 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                | 643                | -             | -             | -             | -             | -             | -             | 0.240         | 0.342         | 0.240         | -             | -             | -             |
|          | B-A                | 497                | 0.112         | 0.283         | 0.283         | -             | -             | -             | 0.178         | 0.405         | -             | 0.283         | 0.283         | 0.142         |
|          | B-C                | 683                | 0.101         | 0.254         | -             | -             | -             | -             | -             | -             | -             | -             | -             | -             |
|          | B-D, nearside lane | 540                | 0.095         | 0.239         | 0.239         | -             | -             | -             | 0.150         | 0.342         | 0.150         | -             | -             | -             |
|          | B-D, offside lane  | 641                | 0.112         | 0.283         | 0.283         | -             | -             | -             | 0.178         | 0.405         | 0.178         | -             | -             | -             |
|          | C-B                | 634                | 0.236         | 0.236         | 0.337         | -             | -             | -             | -             | -             | -             | -             | -             | -             |
|          | D-A                | 776                | -             | -             | -             | -             | -             | -             | 0.289         | -             | 0.114         | -             | -             | -             |
|          | D-B, nearside lane | 616                | 0.172         | 0.172         | 0.389         | -             | -             | -             | 0.273         | 0.273         | 0.108         | -             | -             | -             |
|          | D-B, offside lane  | 616                | 0.172         | 0.172         | 0.389         | -             | -             | -             | 0.273         | 0.273         | 0.108         | -             | -             | -             |
|          | D-C                | 616                | -             | 0.172         | 0.389         | 0.136         | 0.273         | 0.273         | 0.273         | 0.273         | 0.108         | -             | -             | -             |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 2        | B-A    | 483                | 0.105         | 0.265         | 0.167         | 0.379         |
|          | B-C    | 622                | 0.091         | 0.230         | -             | -             |
|          | C-B    | 664                | 0.246         | 0.246         | -             | -             |

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

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

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name     | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|-------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2024 + DEV Custom | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 770                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 250                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 521                     | 100.000            |
|          | D   |            | ONE HOUR     | ✓            | 39                      | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 663                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 232                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 557                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      |   | To  |     |     |    |
|------|---|-----|-----|-----|----|
|      |   | A   | B   | C   | D  |
| From | A | 0   | 481 | 278 | 11 |
|      | B | 228 | 0   | 4   | 18 |
|      | C | 435 | 39  | 0   | 47 |
|      | D | 18  | 10  | 11  | 0  |

### Demand (PCU/hr)

#### Junction 2

|      | To |     |     |     |
|------|----|-----|-----|-----|
|      |    | A   | B   | C   |
| From | A  | 0   | 292 | 371 |
|      | B  | 218 | 0   | 14  |
|      | C  | 541 | 16  | 0   |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|      | To |    |    |    |    |
|------|----|----|----|----|----|
|      |    | A  | B  | C  | D  |
| From | A  | 10 | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 | 10 |
|      | D  | 10 | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|      | To |    |    |    |
|------|----|----|----|----|
| From |    | A  | B  | C  |
|      | A  | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-CD   | 1.11    | 516.90        | 3.1             | F       | 19                      | 28                            |
|          | B-AD   | 1.09    | 253.41        | 17.7            | F       | 211                     | 316                           |
|          | A-BCD  | 0.05    | 4.29          | 0.1             | A       | 34                      | 51                            |
|          | A-B    |         |               |                 |         | 426                     | 639                           |
|          | A-C    |         |               |                 |         | 246                     | 370                           |
|          | D-ABC  | 0.10    | 10.16         | 0.1             | B       | 36                      | 54                            |
|          | C-D    |         |               |                 |         | 43                      | 65                            |
|          | C-A    |         |               |                 |         | 399                     | 599                           |
| 2        | C-B    | 0.10    | 10.17         | 0.1             | B       | 36                      | 54                            |
|          | B-C    | 1.05    | 497.66        | 2.1             | F       | 13                      | 19                            |
|          | B-A    | 1.03    | 198.03        | 12.9            | F       | 200                     | 300                           |
|          | C-AB   | 0.04    | 8.48          | 0.0             | A       | 15                      | 22                            |
|          | C-A    |         |               |                 |         | 496                     | 745                           |
|          | A-B    |         |               |                 |         | 268                     | 402                           |
|          | A-C    |         |               |                 |         | 340                     | 511                           |

## Main Results for each time segment

### 16:30 - 16:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 13                    | 3                       | 304               | 0.044 | 13                  | 0.0               | 0.1             | 13.606    | B                             |
|          | B-AD   | 175                   | 44                      | 318               | 0.549 | 170                 | 0.0               | 1.3             | 25.848    | D                             |
|          | ABCD   | 21                    | 5                       | 944               | 0.022 | 21                  | 0.0               | 0.0             | 4.287     | A                             |
|          | AB     | 354                   | 89                      |                   |       | 354                 |                   |                 |           |                               |
|          | AC     | 205                   | 51                      |                   |       | 205                 |                   |                 |           |                               |
|          | D-ABC  | 29                    | 7                       | 518               | 0.057 | 29                  | 0.0               | 0.1             | 8.093     | A                             |
|          | C-D    | 35                    | 9                       |                   |       | 35                  |                   |                 |           |                               |
|          | C-A    | 327                   | 82                      |                   |       | 327                 |                   |                 |           |                               |
| 2        | C-B    | 29                    | 7                       | 496               | 0.059 | 29                  | 0.0               | 0.1             | 8.475     | A                             |
|          | B-C    | 11                    | 3                       | 398               | 0.026 | 10                  | 0.0               | 0.0             | 10.206    | B                             |
|          | B-A    | 164                   | 41                      | 313               | 0.524 | 160                 | 0.0               | 1.1             | 25.120    | D                             |
|          | C-AB   | 12                    | 3                       | 542               | 0.022 | 12                  | 0.0               | 0.0             | 7.477     | A                             |
|          | C-A    | 407                   | 102                     |                   |       | 407                 |                   |                 |           |                               |
|          | AB     | 220                   | 55                      |                   |       | 220                 |                   |                 |           |                               |
|          | AC     | 279                   | 70                      |                   |       | 279                 |                   |                 |           |                               |

### 16:45 - 17:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 18                    | 4                       | 188               | 0.094 | 17                  | 0.1               | 0.1             | 23.236    | C                             |
|          | B-AD   | 207                   | 52                      | 282               | 0.734 | 202                 | 1.3               | 2.6             | 46.418    | E                             |
|          | ABCD   | 31                    | 8                       | 1010              | 0.030 | 31                  | 0.0               | 0.0             | 4.043     | A                             |
|          | AB     | 419                   | 105                     |                   |       | 419                 |                   |                 |           |                               |
|          | AC     | 242                   | 61                      |                   |       | 242                 |                   |                 |           |                               |
|          | D-ABC  | 35                    | 9                       | 484               | 0.072 | 35                  | 0.1               | 0.1             | 8.817     | A                             |
|          | C-D    | 42                    | 11                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 391                   | 98                      |                   |       | 391                 |                   |                 |           |                               |
| 2        | C-B    | 35                    | 9                       | 469               | 0.075 | 35                  | 0.1               | 0.1             | 9.114     | A                             |
|          | B-C    | 13                    | 3                       | 272               | 0.046 | 12                  | 0.0               | 0.1             | 15.260    | C                             |
|          | B-A    | 196                   | 49                      | 280               | 0.700 | 192                 | 1.1               | 2.2             | 42.712    | E                             |
|          | C-AB   | 14                    | 4                       | 518               | 0.028 | 14                  | 0.0               | 0.0             | 7.867     | A                             |
|          | C-A    | 486                   | 122                     |                   |       | 486                 |                   |                 |           |                               |
|          | AB     | 263                   | 66                      |                   |       | 263                 |                   |                 |           |                               |
|          | AC     | 334                   | 83                      |                   |       | 334                 |                   |                 |           |                               |

### 17:00 - 17:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 24                    | 6                       | 22                | 1.107 | 15                  | 0.1               | 2.4             | 415.262   | F                             |
|          | B-AD   | 251                   | 63                      | 232               | 1.083 | 217                 | 2.6               | 11.2            | 146.905   | F                             |
|          | ABCD   | 50                    | 12                      | 1104              | 0.045 | 50                  | 0.0               | 0.1             | 3.754     | A                             |
|          | AB     | 506                   | 126                     |                   |       | 506                 |                   |                 |           |                               |
|          | AC     | 292                   | 73                      |                   |       | 292                 |                   |                 |           |                               |
|          | D-ABC  | 43                    | 11                      | 436               | 0.099 | 43                  | 0.1               | 0.1             | 10.080    | B                             |
|          | C-D    | 52                    | 13                      |                   |       | 52                  |                   |                 |           |                               |
|          | C-A    | 479                   | 120                     |                   |       | 479                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 432               | 0.099 | 43                  | 0.1               | 0.1             | 10.159    | B                             |
|          | B-C    | 15                    | 4                       | 15                | 1.048 | 9                   | 0.1               | 1.7             | 497.664   | F                             |
|          | B-A    | 240                   | 60                      | 234               | 1.024 | 214                 | 2.2               | 8.8             | 123.710   | F                             |
|          | C-AB   | 18                    | 4                       | 485               | 0.036 | 18                  | 0.0               | 0.0             | 8.477     | A                             |
|          | C-A    | 596                   | 149                     |                   |       | 596                 |                   |                 |           |                               |
|          | AB     | 321                   | 80                      |                   |       | 321                 |                   |                 |           |                               |
|          | AC     | 408                   | 102                     |                   |       | 408                 |                   |                 |           |                               |

## 17:15 - 17:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 24                    | 6                       | 26                | 0.923 | 21                  | 2.4               | 3.1             | 516.902   | F                             |
|          | B-AD   | 251                   | 63                      | 230               | 1.089 | 225                 | 11.2              | 17.7            | 253.409   | F                             |
|          | ABCD   | 50                    | 13                      | 1104              | 0.045 | 50                  | 0.1               | 0.1             | 3.757     | A                             |
|          | AB     | 506                   | 126                     |                   |       | 506                 |                   |                 |           |                               |
|          | AC     | 292                   | 73                      |                   |       | 292                 |                   |                 |           |                               |
|          | D-ABC  | 43                    | 11                      | 433               | 0.099 | 43                  | 0.1               | 0.1             | 10.160    | B                             |
|          | C-D    | 52                    | 13                      |                   |       | 52                  |                   |                 |           |                               |
|          | C-A    | 479                   | 120                     |                   |       | 479                 |                   |                 |           |                               |
| 2        | C-B    | 43                    | 11                      | 432               | 0.099 | 43                  | 0.1               | 0.1             | 10.165    | B                             |
|          | B-C    | 15                    | 4                       | 19                | 0.823 | 14                  | 1.7               | 2.1             | 431.291   | F                             |
|          | B-A    | 240                   | 60                      | 234               | 1.027 | 224                 | 8.8               | 12.9            | 198.034   | F                             |
|          | C-AB   | 18                    | 4                       | 485               | 0.036 | 18                  | 0.0               | 0.0             | 8.477     | A                             |
|          | C-A    | 596                   | 149                     |                   |       | 596                 |                   |                 |           |                               |
|          | AB     | 321                   | 80                      |                   |       | 321                 |                   |                 |           |                               |
|          | AC     | 408                   | 102                     |                   |       | 408                 |                   |                 |           |                               |

## 17:30 - 17:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 20                    | 5                       | 36                | 0.546 | 25                  | 3.1               | 1.8             | 314.181   | F                             |
|          | B-AD   | 205                   | 51                      | 278               | 0.739 | 258                 | 17.7              | 4.5             | 165.137   | F                             |
|          | ABCD   | 31                    | 8                       | 1010              | 0.030 | 31                  | 0.1               | 0.0             | 4.044     | A                             |
|          | AB     | 419                   | 105                     |                   |       | 419                 |                   |                 |           |                               |
|          | AC     | 242                   | 61                      |                   |       | 242                 |                   |                 |           |                               |
|          | D-ABC  | 35                    | 9                       | 479               | 0.073 | 35                  | 0.1               | 0.1             | 8.922     | A                             |
|          | C-D    | 42                    | 11                      |                   |       | 42                  |                   |                 |           |                               |
|          | C-A    | 391                   | 98                      |                   |       | 391                 |                   |                 |           |                               |
| 2        | C-B    | 35                    | 9                       | 469               | 0.075 | 35                  | 0.1               | 0.1             | 9.122     | A                             |
|          | B-C    | 13                    | 3                       | 135               | 0.094 | 20                  | 2.1               | 0.1             | 36.795    | E                             |
|          | B-A    | 196                   | 49                      | 279               | 0.703 | 235                 | 12.9              | 3.2             | 106.841   | F                             |
|          | C-AB   | 14                    | 4                       | 518               | 0.028 | 14                  | 0.0               | 0.0             | 7.868     | A                             |
|          | C-A    | 486                   | 122                     |                   |       | 486                 |                   |                 |           |                               |
|          | AB     | 263                   | 66                      |                   |       | 263                 |                   |                 |           |                               |
|          | AC     | 334                   | 83                      |                   |       | 334                 |                   |                 |           |                               |

## 17:45 - 18:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-CD   | 14                    | 3                       | 279               | 0.050 | 21                  | 1.8               | 0.1             | 15.760    | C                             |
|          | B-AD   | 174                   | 44                      | 316               | 0.551 | 187                 | 4.5               | 1.4             | 32.962    | D                             |
|          | ABCD   | 21                    | 5                       | 944               | 0.022 | 21                  | 0.0               | 0.0             | 4.290     | A                             |
|          | AB     | 354                   | 89                      |                   |       | 354                 |                   |                 |           |                               |
|          | AC     | 205                   | 51                      |                   |       | 205                 |                   |                 |           |                               |
|          | D-ABC  | 29                    | 7                       | 516               | 0.057 | 29                  | 0.1               | 0.1             | 8.134     | A                             |
|          | C-D    | 35                    | 9                       |                   |       | 35                  |                   |                 |           |                               |
|          | C-A    | 327                   | 82                      |                   |       | 327                 |                   |                 |           |                               |
| 2        | C-B    | 29                    | 7                       | 496               | 0.059 | 29                  | 0.1               | 0.1             | 8.488     | A                             |
|          | B-C    | 11                    | 3                       | 377               | 0.028 | 11                  | 0.1               | 0.0             | 10.828    | B                             |
|          | B-A    | 164                   | 41                      | 313               | 0.524 | 172                 | 3.2               | 1.3             | 29.344    | D                             |
|          | C-AB   | 12                    | 3                       | 542               | 0.022 | 12                  | 0.0               | 0.0             | 7.481     | A                             |
|          | C-A    | 407                   | 102                     |                   |       | 407                 |                   |                 |           |                               |
|          | AB     | 220                   | 55                      |                   |       | 220                 |                   |                 |           |                               |
|          | AC     | 279                   | 70                      |                   |       | 279                 |                   |                 |           |                               |

# Appendix F

## PICADY Output – A635/ A616

| Junctions 10                                                                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| PICADY 10 - Priority Intersection Module                                                                                                                         |  |  |  |  |  |  |  |  |  |  |  |
| Version: 10.1.1.1905                                                                                                                                             |  |  |  |  |  |  |  |  |  |  |  |
| © Copyright TRL Software Limited, 2023                                                                                                                           |  |  |  |  |  |  |  |  |  |  |  |
| For sales and distribution information, program advice and maintenance, contact TRL Software:                                                                    |  |  |  |  |  |  |  |  |  |  |  |
| +44 (0)1344 379777    software@trl.co.uk    trlsoftware.com                                                                                                      |  |  |  |  |  |  |  |  |  |  |  |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |  |  |  |  |  |  |  |  |  |  |

Filename: 2024 Base.j10

Path: Z:\Documents\PARAGON HIGHWAYS\Bromley Farm Quarry\PICADY\PICADY New Mill\PICADY Standard

Report generation date: 1/7/2025 2:11:46 PM

»2024, AM BASE

»2024, PM BASE

### Summary of junction performance

|                          | AM BASE |             |           |      |     |                                   | PM BASE |             |           |      |     |                                    |
|--------------------------|---------|-------------|-----------|------|-----|-----------------------------------|---------|-------------|-----------|------|-----|------------------------------------|
|                          | Set ID  | Queue (PCU) | Delay (s) | RFC  | LOS | Network Residual Capacity         | Set ID  | Queue (PCU) | Delay (s) | RFC  | LOS | Network Residual Capacity          |
| 2024                     |         |             |           |      |     |                                   |         |             |           |      |     |                                    |
| Junction 1 - Stream B-C  | D1      | 0.4         | 24.10     | 0.28 | C   | -5 %<br>[Junction 1 - Stream B-A] | D2      | 4.6         | 236.09    | 0.99 | F   | -17 %<br>[Junction 1 - Stream B-A] |
| Junction 1 - Stream B-A  |         | 4.0         | 46.14     | 0.80 | E   |                                   |         | 13.5        | 121.18    | 0.99 | F   |                                    |
| Junction 1 - Stream C-AB |         | 1.1         | 14.29     | 0.48 | B   |                                   |         | 0.8         | 11.71     | 0.39 | B   |                                    |
| Junction 2 - Stream B-AC |         | 1.4         | 21.41     | 0.57 | C   |                                   |         | 1.4         | 20.16     | 0.57 | C   |                                    |
| Junction 2 - Stream C-AB |         | 2.4         | 15.32     | 0.60 | C   |                                   |         | 2.0         | 11.58     | 0.54 | B   |                                    |

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

### File summary

#### File Description

|             |                             |
|-------------|-----------------------------|
| Title       | Bromley Farm Quarry         |
| Location    | New Mill Junction A616 A635 |
| Site number | 2074                        |
| Date        | 12/17/2024                  |
| Version     |                             |
| Status      |                             |
| Identifier  |                             |
| Client      | SE                          |
| Jobnumber   | 2074C                       |
| Enumerator  | JH                          |
| Description | 2024 Base Standard          |

### Units

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

## Analysis Options

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

## Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2024          | AM BASE          | ONE HOUR             | 00:00              | 01:30               | 15                        | ✓                 |
| D2 | 2024          | PM BASE          | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

## Analysis Set Details

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

# 2024, AM BASE

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 14.50              | B            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 6.85               | A            |

### Junction Network

| Driving side | Lighting       | Network residual capacity (%) | First arm reaching threshold | Network delay (s) | Network LOS |
|--------------|----------------|-------------------------------|------------------------------|-------------------|-------------|
| Left         | Normal/unknown | -5                            | Junction 1 - Stream B-A      | 10.46             | B           |

## Arms

### Arms

| Junction | Arm | Name                   | Description | Arm type |
|----------|-----|------------------------|-------------|----------|
| 1        | A   | A635 Holmfirth Road    |             | Major    |
|          | B   | A635 Penistone Road    |             | Minor    |
|          | C   | A616 Sheffield Road    |             | Major    |
| 2        | A   | A635 Penistone Road    |             | Major    |
|          | B   | A616 Huddersfield Road |             | Minor    |
|          | C   | A635 Penistone Road    |             | Major    |

### Major Arm Geometry

| Junction | Arm | Width of carriageway (m) | Has kerbed central reserve | Has right-turn storage | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|----------|-----|--------------------------|----------------------------|------------------------|-------------------------------|---------|----------------------|
| 1        | C   | 8.95                     |                            |                        | 30.0                          | ✓       | 0.00                 |
| 2        | C   | 6.60                     |                            |                        | 43.0                          | ✓       | 0.00                 |

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

### Minor Arm Geometry

| Junction | Arm | Minor arm type      | Lane width (m) | 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) |
|----------|-----|---------------------|----------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| 1        | B   | One lane plus flare |                | 10.00                 | 5.20            | 3.80             | 3.80             | 3.30             | ✓                     | 1.00               | 32                     | 80                      |
| 2        | B   | One lane            | 4.52           |                       |                 |                  |                  |                  |                       |                    | 20                     | 35                      |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 1        | B-A    | 583                | 0.093         | 0.234         | 0.147         | 0.334         |
|          | B-C    | 669                | 0.089         | 0.226         | -             | -             |
|          | C-B    | 591                | 0.200         | 0.200         | -             | -             |

## Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 2        | B-A    | 578                | 0.102         | 0.259         | 0.163         | 0.370         |
|          | B-C    | 744                | 0.111         | 0.281         | -             | -             |
|          | C-B    | 599                | 0.226         | 0.226         | -             | -             |

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

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

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2024          | AM BASE          | ONE HOUR             | 00:00              | 01:30               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 634                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 359                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 280                     | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 730                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 224                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 471                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      | To |     |     |    |
|------|----|-----|-----|----|
| From |    | A   | B   | C  |
|      | A  | 0   | 546 | 88 |
|      | B  | 301 | 0   | 58 |
|      | C  | 96  | 184 | 0  |

### Demand (PCU/hr)

#### Junction 2

|      | To |     |     |     |
|------|----|-----|-----|-----|
| From |    | A   | B   | C   |
|      | A  | 0   | 287 | 443 |
|      | B  | 75  | 0   | 149 |
|      | C  | 284 | 187 | 0   |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|      | To |    |    |    |
|------|----|----|----|----|
| From |    | A  | B  | C  |
|      | A  | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 |

Heavy Vehicle %

Junction 2

|      | To |    |    |    |
|------|----|----|----|----|
|      |    | A  | B  | C  |
| From | A  | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-C    | 0.28    | 24.10         | 0.4             | C       | 53                      | 80                            |
|          | B-A    | 0.80    | 46.14         | 4.0             | E       | 276                     | 414                           |
|          | C-AB   | 0.48    | 14.29         | 1.1             | B       | 204                     | 305                           |
|          | C-A    |         |               |                 |         | 53                      | 80                            |
|          | A-B    |         |               |                 |         | 501                     | 752                           |
|          | A-C    |         |               |                 |         | 81                      | 121                           |
| 2        | B-AC   | 0.57    | 21.41         | 1.4             | C       | 206                     | 308                           |
|          | C-AB   | 0.60    | 15.32         | 2.4             | C       | 297                     | 446                           |
|          | C-A    |         |               |                 |         | 135                     | 202                           |
|          | A-B    |         |               |                 |         | 263                     | 395                           |
|          | A-C    |         |               |                 |         | 407                     | 610                           |

### Main Results for each time segment

00:00 - 00:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 44                    | 11                      | 485               | 0.090 | 43                  | 0.0               | 0.1             | 8.957     | A                             |
|          | B-A    | 227                   | 57                      | 471               | 0.481 | 223                 | 0.0               | 1.0             | 15.728    | C                             |
|          | C-AB   | 160                   | 40                      | 548               | 0.291 | 158                 | 0.0               | 0.5             | 10.094    | B                             |
|          | C-A    | 51                    | 13                      |                   |       | 51                  |                   |                 |           |                               |
|          | A-B    | 411                   | 103                     |                   |       | 411                 |                   |                 |           |                               |
|          | A-C    | 66                    | 17                      |                   |       | 66                  |                   |                 |           |                               |
| 2        | B-AC   | 169                   | 42                      | 516               | 0.327 | 167                 | 0.0               | 0.5             | 11.269    | B                             |
|          | C-AB   | 213                   | 53                      | 632               | 0.337 | 210                 | 0.0               | 0.7             | 9.346     | A                             |
|          | C-A    | 142                   | 35                      |                   |       | 142                 |                   |                 |           |                               |
|          | A-B    | 216                   | 54                      |                   |       | 216                 |                   |                 |           |                               |
|          | A-C    | 334                   | 83                      |                   |       | 334                 |                   |                 |           |                               |

## 00:15 - 00:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 52                    | 13                      | 404               | 0.129 | 52                  | 0.1               | 0.2             | 11.246    | B                             |
|          | B-A    | 271                   | 68                      | 447               | 0.605 | 268                 | 1.0               | 1.6             | 21.810    | C                             |
|          | C-AB   | 197                   | 49                      | 541               | 0.364 | 196                 | 0.5               | 0.7             | 11.478    | B                             |
|          | C-A    | 55                    | 14                      |                   |       | 55                  |                   |                 |           |                               |
|          | A-B    | 491                   | 123                     |                   |       | 491                 |                   |                 |           |                               |
|          | A-C    | 79                    | 20                      |                   |       | 79                  |                   |                 |           |                               |
| 2        | B-AC   | 201                   | 50                      | 481               | 0.418 | 200                 | 0.5               | 0.8             | 14.037    | B                             |
|          | C-AB   | 280                   | 70                      | 643               | 0.436 | 279                 | 0.7               | 1.2             | 10.907    | B                             |
|          | C-A    | 143                   | 36                      |                   |       | 143                 |                   |                 |           |                               |
|          | A-B    | 258                   | 65                      |                   |       | 258                 |                   |                 |           |                               |
|          | A-C    | 398                   | 100                     |                   |       | 398                 |                   |                 |           |                               |

## 00:30 - 00:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 64                    | 16                      | 247               | 0.259 | 63                  | 0.2               | 0.4             | 21.482    | C                             |
|          | B-A    | 331                   | 83                      | 414               | 0.801 | 323                 | 1.6               | 3.6             | 40.436    | E                             |
|          | C-AB   | 254                   | 63                      | 531               | 0.477 | 252                 | 0.7               | 1.1             | 14.131    | B                             |
|          | C-A    | 55                    | 14                      |                   |       | 55                  |                   |                 |           |                               |
|          | A-B    | 601                   | 150                     |                   |       | 601                 |                   |                 |           |                               |
|          | A-C    | 97                    | 24                      |                   |       | 97                  |                   |                 |           |                               |
| 2        | B-AC   | 247                   | 62                      | 432               | 0.571 | 244                 | 0.8               | 1.4             | 20.812    | C                             |
|          | C-AB   | 395                   | 99                      | 659               | 0.600 | 391                 | 1.2               | 2.3             | 14.829    | B                             |
|          | C-A    | 123                   | 31                      |                   |       | 123                 |                   |                 |           |                               |
|          | A-B    | 316                   | 79                      |                   |       | 316                 |                   |                 |           |                               |
|          | A-C    | 488                   | 122                     |                   |       | 488                 |                   |                 |           |                               |

## 00:45 - 01:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 64                    | 16                      | 228               | 0.280 | 64                  | 0.4               | 0.4             | 24.103    | C                             |
|          | B-A    | 331                   | 83                      | 413               | 0.803 | 330                 | 3.6               | 4.0             | 46.142    | E                             |
|          | C-AB   | 254                   | 63                      | 532               | 0.477 | 254                 | 1.1               | 1.1             | 14.295    | B                             |
|          | C-A    | 54                    | 14                      |                   |       | 54                  |                   |                 |           |                               |
|          | A-B    | 601                   | 150                     |                   |       | 601                 |                   |                 |           |                               |
|          | A-C    | 97                    | 24                      |                   |       | 97                  |                   |                 |           |                               |
| 2        | B-AC   | 247                   | 62                      | 431               | 0.572 | 246                 | 1.4               | 1.4             | 21.409    | C                             |
|          | C-AB   | 398                   | 99                      | 661               | 0.602 | 397                 | 2.3               | 2.4             | 15.319    | C                             |
|          | C-A    | 121                   | 30                      |                   |       | 121                 |                   |                 |           |                               |
|          | A-B    | 316                   | 79                      |                   |       | 316                 |                   |                 |           |                               |
|          | A-C    | 488                   | 122                     |                   |       | 488                 |                   |                 |           |                               |

## 01:00 - 01:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 52                    | 13                      | 385               | 0.135 | 53                  | 0.4               | 0.2             | 11.958    | B                             |
|          | B-A    | 271                   | 68                      | 446               | 0.606 | 279                 | 4.0               | 1.8             | 24.821    | C                             |
|          | C-AB   | 198                   | 49                      | 542               | 0.365 | 199                 | 1.1               | 0.7             | 11.640    | B                             |
|          | C-A    | 54                    | 14                      |                   |       | 54                  |                   |                 |           |                               |
|          | A-B    | 491                   | 123                     |                   |       | 491                 |                   |                 |           |                               |
|          | A-C    | 79                    | 20                      |                   |       | 79                  |                   |                 |           |                               |
| 2        | B-AC   | 201                   | 50                      | 480               | 0.419 | 204                 | 1.4               | 0.8             | 14.446    | B                             |
|          | C-AB   | 283                   | 71                      | 645               | 0.438 | 287                 | 2.4               | 1.3             | 11.282    | B                             |
|          | C-A    | 141                   | 35                      |                   |       | 141                 |                   |                 |           |                               |
|          | A-B    | 258                   | 65                      |                   |       | 258                 |                   |                 |           |                               |
|          | A-C    | 398                   | 100                     |                   |       | 398                 |                   |                 |           |                               |

## 01:15 - 01:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 44                    | 11                      | 477               | 0.092 | 44                  | 0.2               | 0.1             | 9.157     | A                             |
|          | B-A    | 227                   | 57                      | 470               | 0.482 | 230                 | 1.8               | 1.1             | 16.676    | C                             |
|          | C-AB   | 160                   | 40                      | 549               | 0.291 | 161                 | 0.7               | 0.5             | 10.243    | B                             |
|          | C-A    | 51                    | 13                      |                   |       | 51                  |                   |                 |           |                               |
|          | A-B    | 411                   | 103                     |                   |       | 411                 |                   |                 |           |                               |
|          | A-C    | 66                    | 17                      |                   |       | 66                  |                   |                 |           |                               |
| 2        | B-AC   | 169                   | 42                      | 515               | 0.327 | 170                 | 0.8               | 0.5             | 11.500    | B                             |
|          | C-AB   | 214                   | 54                      | 634               | 0.338 | 216                 | 1.3               | 0.8             | 9.568     | A                             |
|          | C-A    | 140                   | 35                      |                   |       | 140                 |                   |                 |           |                               |
|          | A-B    | 216                   | 54                      |                   |       | 216                 |                   |                 |           |                               |
|          | A-C    | 334                   | 83                      |                   |       | 334                 |                   |                 |           |                               |

# 2024, PM BASE

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 51.31              | F            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 6.45               | A            |

### Junction Network

| Driving side | Lighting       | Network residual capacity (%) | First arm reaching threshold | Network delay (s) | Network LOS |
|--------------|----------------|-------------------------------|------------------------------|-------------------|-------------|
| Left         | Normal/unknown | -17                           | Junction 1 - Stream B-A      | 28.07             | D           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2024          | PM BASE          | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 528                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 441                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 262                     | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 560                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 235                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 529                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      | To |     |     |     |
|------|----|-----|-----|-----|
|      |    | A   | B   | C   |
| From | A  | 0   | 401 | 127 |
|      | B  | 376 | 0   | 65  |
|      | C  | 103 | 159 | 0   |
|      |    |     |     |     |

### Demand (PCU/hr)

#### Junction 2

|      | To |     |     |     |
|------|----|-----|-----|-----|
|      |    | A   | B   | C   |
| From | A  | 0   | 209 | 351 |
|      | B  | 87  | 0   | 148 |
|      | C  | 354 | 175 | 0   |
|      |    |     |     |     |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|      | To |    |    |    |
|------|----|----|----|----|
|      | A  | B  | C  |    |
| From | A  | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|      | To |    |    |    |
|------|----|----|----|----|
|      | A  | B  | C  |    |
| From | A  | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-C    | 0.99    | 236.09        | 4.6             | F       | 60                      | 89                            |
|          | B-A    | 0.99    | 121.18        | 13.5            | F       | 345                     | 518                           |
|          | C-AB   | 0.39    | 11.71         | 0.8             | B       | 177                     | 265                           |
|          | C-A    |         |               |                 |         | 64                      | 95                            |
|          | A-B    |         |               |                 |         | 368                     | 552                           |
|          | A-C    |         |               |                 |         | 117                     | 175                           |
| 2        | B-AC   | 0.57    | 20.16         | 1.4             | C       | 216                     | 323                           |
|          | C-AB   | 0.54    | 11.58         | 2.0             | B       | 301                     | 452                           |
|          | C-A    |         |               |                 |         | 184                     | 276                           |
|          | A-B    |         |               |                 |         | 192                     | 288                           |
|          | A-C    |         |               |                 |         | 322                     | 483                           |

## Main Results for each time segment

### 17:00 - 17:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 49                    | 12                      | 425               | 0.115 | 48                  | 0.0               | 0.1             | 10.497    | B                             |
|          | B-A    | 283                   | 71                      | 479               | 0.591 | 277                 | 0.0               | 1.5             | 19.086    | C                             |
|          | C-AB   | 139                   | 35                      | 567               | 0.244 | 137                 | 0.0               | 0.4             | 9.177     | A                             |
|          | C-A    | 59                    | 15                      |                   |       | 59                  |                   |                 |           |                               |
|          | A-B    | 302                   | 75                      |                   |       | 302                 |                   |                 |           |                               |
|          | A-C    | 96                    | 24                      |                   |       | 96                  |                   |                 |           |                               |
| 2        | B-AC   | 177                   | 44                      | 529               | 0.334 | 175                 | 0.0               | 0.5             | 11.097    | B                             |
|          | C-AB   | 214                   | 53                      | 696               | 0.307 | 211                 | 0.0               | 0.7             | 8.146     | A                             |
|          | C-A    | 185                   | 46                      |                   |       | 185                 |                   |                 |           |                               |
|          | A-B    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |
|          | A-C    | 264                   | 66                      |                   |       | 264                 |                   |                 |           |                               |

### 17:15 - 17:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 58                    | 15                      | 303               | 0.193 | 58                  | 0.1               | 0.3             | 16.101    | C                             |
|          | B-A    | 338                   | 85                      | 456               | 0.741 | 333                 | 1.5               | 2.8             | 30.808    | D                             |
|          | C-AB   | 171                   | 43                      | 564               | 0.304 | 171                 | 0.4               | 0.5             | 10.074    | B                             |
|          | C-A    | 64                    | 16                      |                   |       | 64                  |                   |                 |           |                               |
|          | A-B    | 360                   | 90                      |                   |       | 360                 |                   |                 |           |                               |
|          | A-C    | 114                   | 29                      |                   |       | 114                 |                   |                 |           |                               |
| 2        | B-AC   | 211                   | 53                      | 499               | 0.423 | 210                 | 0.5               | 0.8             | 13.671    | B                             |
|          | C-AB   | 284                   | 71                      | 718               | 0.396 | 283                 | 0.7               | 1.1             | 9.116     | A                             |
|          | C-A    | 191                   | 48                      |                   |       | 191                 |                   |                 |           |                               |
|          | A-B    | 188                   | 47                      |                   |       | 188                 |                   |                 |           |                               |
|          | A-C    | 316                   | 79                      |                   |       | 316                 |                   |                 |           |                               |

### 17:30 - 17:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 72                    | 18                      | 72                | 0.992 | 57                  | 0.3               | 3.9             | 189.736   | F                             |
|          | B-A    | 414                   | 103                     | 422               | 0.980 | 387                 | 2.8               | 9.6             | 78.243    | F                             |
|          | C-AB   | 220                   | 55                      | 559               | 0.394 | 219                 | 0.5               | 0.8             | 11.640    | B                             |
|          | C-A    | 68                    | 17                      |                   |       | 68                  |                   |                 |           |                               |
|          | A-B    | 442                   | 110                     |                   |       | 442                 |                   |                 |           |                               |
|          | A-C    | 140                   | 35                      |                   |       | 140                 |                   |                 |           |                               |
| 2        | B-AC   | 259                   | 65                      | 455               | 0.568 | 256                 | 0.8               | 1.4             | 19.670    | C                             |
|          | C-AB   | 404                   | 101                     | 751               | 0.538 | 401                 | 1.1               | 1.9             | 11.351    | B                             |
|          | C-A    | 178                   | 45                      |                   |       | 178                 |                   |                 |           |                               |
|          | A-B    | 230                   | 58                      |                   |       | 230                 |                   |                 |           |                               |
|          | A-C    | 386                   | 97                      |                   |       | 386                 |                   |                 |           |                               |

**17:45 - 18:00**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 72                    | 18                      | 81                | 0.887 | 69                  | 3.9               | 4.6             | 236.087   | F                             |
|          | B-A    | 414                   | 103                     | 419               | 0.988 | 399                 | 9.6               | 13.5            | 121.183   | F                             |
|          | C-AB   | 220                   | 55                      | 559               | 0.394 | 220                 | 0.8               | 0.8             | 11.714    | B                             |
|          | C-A    | 68                    | 17                      |                   |       | 68                  |                   |                 |           |                               |
|          | A-B    | 442                   | 110                     |                   |       | 442                 |                   |                 |           |                               |
|          | A-C    | 140                   | 35                      |                   |       | 140                 |                   |                 |           |                               |
| 2        | B-AC   | 259                   | 65                      | 455               | 0.569 | 259                 | 1.4               | 1.4             | 20.162    | C                             |
|          | C-AB   | 406                   | 101                     | 753               | 0.539 | 406                 | 1.9               | 2.0             | 11.577    | B                             |
|          | C-A    | 177                   | 44                      |                   |       | 177                 |                   |                 |           |                               |
|          | A-B    | 230                   | 58                      |                   |       | 230                 |                   |                 |           |                               |
|          | A-C    | 386                   | 97                      |                   |       | 386                 |                   |                 |           |                               |

**18:00 - 18:15**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 58                    | 15                      | 209               | 0.280 | 75                  | 4.6               | 0.4             | 32.907    | D                             |
|          | B-A    | 338                   | 85                      | 450               | 0.752 | 376                 | 13.5              | 3.9             | 65.386    | F                             |
|          | C-AB   | 172                   | 43                      | 564               | 0.304 | 173                 | 0.8               | 0.6             | 10.157    | B                             |
|          | C-A    | 64                    | 16                      |                   |       | 64                  |                   |                 |           |                               |
|          | A-B    | 360                   | 90                      |                   |       | 360                 |                   |                 |           |                               |
|          | A-C    | 114                   | 29                      |                   |       | 114                 |                   |                 |           |                               |
| 2        | B-AC   | 211                   | 53                      | 498               | 0.424 | 214                 | 1.4               | 0.8             | 14.035    | B                             |
|          | C-AB   | 286                   | 72                      | 721               | 0.397 | 290                 | 2.0               | 1.1             | 9.321     | A                             |
|          | C-A    | 190                   | 47                      |                   |       | 190                 |                   |                 |           |                               |
|          | A-B    | 188                   | 47                      |                   |       | 188                 |                   |                 |           |                               |
|          | A-C    | 316                   | 79                      |                   |       | 316                 |                   |                 |           |                               |

**18:15 - 18:30**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 49                    | 12                      | 403               | 0.121 | 50                  | 0.4               | 0.2             | 11.254    | B                             |
|          | B-A    | 283                   | 71                      | 478               | 0.592 | 292                 | 3.9               | 1.7             | 22.193    | C                             |
|          | C-AB   | 139                   | 35                      | 568               | 0.245 | 140                 | 0.6               | 0.4             | 9.270     | A                             |
|          | C-A    | 58                    | 15                      |                   |       | 58                  |                   |                 |           |                               |
|          | A-B    | 302                   | 75                      |                   |       | 302                 |                   |                 |           |                               |
|          | A-C    | 96                    | 24                      |                   |       | 96                  |                   |                 |           |                               |
| 2        | B-AC   | 177                   | 44                      | 529               | 0.335 | 178                 | 0.8               | 0.6             | 11.326    | B                             |
|          | C-AB   | 215                   | 54                      | 697               | 0.309 | 217                 | 1.1               | 0.7             | 8.304     | A                             |
|          | C-A    | 183                   | 46                      |                   |       | 183                 |                   |                 |           |                               |
|          | A-B    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |
|          | A-C    | 264                   | 66                      |                   |       | 264                 |                   |                 |           |                               |

| Junctions 10                                                                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|
| PICADY 10 - Priority Intersection Module                                                                                                                         |  |  |  |  |  |  |  |  |  |  |  |
| Version: 10.1.1.1905                                                                                                                                             |  |  |  |  |  |  |  |  |  |  |  |
| © Copyright TRL Software Limited, 2023                                                                                                                           |  |  |  |  |  |  |  |  |  |  |  |
| For sales and distribution information, program advice and maintenance, contact TRL Software:                                                                    |  |  |  |  |  |  |  |  |  |  |  |
| +44 (0)1344 379777 software@trl.co.uk trlsoftware.com                                                                                                            |  |  |  |  |  |  |  |  |  |  |  |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |  |  |  |  |  |  |  |  |  |  |

Filename: 2024 With Quarry Traffic.j10

Path: Z:\Documents\PARAGON HIGHWAYS\Bromley Farm Quarry\PICADY\PICADY New Mill\PICADY Standard

Report generation date: 1/7/2025 4:26:23 PM

»2024, AM + DEV

»2024, PM + DEV

### Summary of junction performance

|                          | AM + DEV |             |           |      |     |                                   | PM + DEV |             |           |      |     |                                    |
|--------------------------|----------|-------------|-----------|------|-----|-----------------------------------|----------|-------------|-----------|------|-----|------------------------------------|
|                          | Set ID   | Queue (PCU) | Delay (s) | RFC  | LOS | Network Residual Capacity         | Set ID   | Queue (PCU) | Delay (s) | RFC  | LOS | Network Residual Capacity          |
| 2024                     |          |             |           |      |     |                                   |          |             |           |      |     |                                    |
| Junction 1 - Stream B-C  | D1       | 0.6         | 28.81     | 0.37 | D   | -7 %<br>[Junction 1 - Stream B-A] | D2       | 5.6         | 240.41    | 1.02 | F   | -18 %<br>[Junction 1 - Stream B-A] |
| Junction 1 - Stream B-A  |          | 4.4         | 51.62     | 0.82 | F   |                                   |          | 16.0        | 141.63    | 1.01 | F   |                                    |
| Junction 1 - Stream C-AB |          | 1.3         | 15.37     | 0.51 | C   |                                   |          | 0.9         | 12.43     | 0.43 | B   |                                    |
| Junction 2 - Stream B-AC |          | 1.5         | 22.19     | 0.58 | C   |                                   |          | 1.5         | 20.85     | 0.58 | C   |                                    |
| Junction 2 - Stream C-AB |          | 2.6         | 15.60     | 0.61 | C   |                                   |          | 2.1         | 11.72     | 0.55 | B   |                                    |

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

### File summary

#### File Description

|             |                                   |
|-------------|-----------------------------------|
| Title       | Bromley Farm Quarry               |
| Location    | New Mill Junction A616 A635       |
| Site number | 2074                              |
| Date        | 7/1/2025                          |
| Version     |                                   |
| Status      |                                   |
| Identifier  |                                   |
| Client      | SE                                |
| Jobnumber   | 2074C                             |
| Enumerator  | LO                                |
| Description | 2024 With Quarry Traffic Standard |

### Units

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

## Analysis Options

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

## Demand Set Summary

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2024          | AM + DEV         | ONE HOUR             | 00:00              | 01:30               | 15                        | ✓                 |
| D2 | 2024          | PM + DEV         | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

## Analysis Set Details

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

# 2024, AM + DEV

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 16.36              | C            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 7.00               | A            |

### Junction Network

| Driving side | Lighting       | Network residual capacity (%) | First arm reaching threshold | Network delay (s) | Network LOS |
|--------------|----------------|-------------------------------|------------------------------|-------------------|-------------|
| Left         | Normal/unknown | -7                            | Junction 1 - Stream B-A      | 11.42             | B           |

## Arms

### Arms

| Junction | Arm | Name                   | Description | Arm type |
|----------|-----|------------------------|-------------|----------|
| 1        | A   | A635 Holmfirth Road    |             | Major    |
|          | B   | A635 Penistone Road    |             | Minor    |
|          | C   | A616 Sheffield Road    |             | Major    |
| 2        | A   | A635 Penistone Road    |             | Major    |
|          | B   | A616 Huddersfield Road |             | Minor    |
|          | C   | A635 Penistone Road    |             | Major    |

### Major Arm Geometry

| Junction | Arm | Width of carriageway (m) | Has kerbed central reserve | Has right-turn storage | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|----------|-----|--------------------------|----------------------------|------------------------|-------------------------------|---------|----------------------|
| 1        | C   | 8.95                     |                            |                        | 30.0                          | ✓       | 0.00                 |
| 2        | C   | 6.60                     |                            |                        | 43.0                          | ✓       | 0.00                 |

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

### Minor Arm Geometry

| Junction | Arm | Minor arm type      | Lane width (m) | 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) |
|----------|-----|---------------------|----------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| 1        | B   | One lane plus flare |                | 10.00                 | 5.20            | 3.80             | 3.80             | 3.30             | ✓                     | 1.00               | 32                     | 80                      |
| 2        | B   | One lane            | 4.52           |                       |                 |                  |                  |                  |                       |                    | 20                     | 35                      |

### Slope / Intercept / Capacity

#### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 1        | B-A    | 581                | 0.092         | 0.233         | 0.147         | 0.333         |
|          | B-C    | 674                | 0.090         | 0.228         | -             | -             |
|          | C-B    | 591                | 0.200         | 0.200         | -             | -             |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 2        | B-A    | 578                | 0.102         | 0.259         | 0.163         | 0.370         |
|          | B-C    | 744                | 0.111         | 0.281         | -             | -             |
|          | C-B    | 599                | 0.226         | 0.226         | -             | -             |

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

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

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2024          | AM + DEV         | ONE HOUR             | 00:00              | 01:30               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 634                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 373                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 294                     | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 744                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 224                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 485                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|  | From | To  |     |    |
|--|------|-----|-----|----|
|  |      | A   | B   | C  |
|  | A    | 0   | 546 | 88 |
|  | B    | 301 | 0   | 72 |
|  | C    | 96  | 198 | 0  |

### Demand (PCU/hr)

#### Junction 2

|  | From | To  |     |     |
|--|------|-----|-----|-----|
|  |      | A   | B   | C   |
|  | A    | 0   | 287 | 457 |
|  | B    | 75  | 0   | 149 |
|  | C    | 298 | 187 | 0   |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|  | From | To |    |    |
|--|------|----|----|----|
|  |      | A  | B  | C  |
|  | A    | 10 | 10 | 10 |
|  | B    | 10 | 10 | 10 |
|  | C    | 10 | 10 | 10 |

Heavy Vehicle %

Junction 2

|      | To |    |    |    |
|------|----|----|----|----|
| From |    | A  | B  | C  |
|      | A  | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-C    | 0.37    | 28.81         | 0.6             | D       | 66                      | 99                            |
|          | B-A    | 0.82    | 51.62         | 4.4             | F       | 276                     | 414                           |
|          | C-AB   | 0.51    | 15.37         | 1.3             | C       | 219                     | 329                           |
|          | C-A    |         |               |                 |         | 51                      | 76                            |
|          | A-B    |         |               |                 |         | 501                     | 752                           |
|          | A-C    |         |               |                 |         | 81                      | 121                           |
| 2        | B-AC   | 0.58    | 22.19         | 1.5             | C       | 206                     | 308                           |
|          | C-AB   | 0.61    | 15.60         | 2.6             | C       | 306                     | 458                           |
|          | C-A    |         |               |                 |         | 139                     | 209                           |
|          | A-B    |         |               |                 |         | 263                     | 395                           |
|          | A-C    |         |               |                 |         | 419                     | 629                           |

### Main Results for each time segment

00:00 - 00:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 54                    | 14                      | 487               | 0.111 | 54                  | 0.0               | 0.1             | 9.129     | A                             |
|          | B-A    | 227                   | 57                      | 465               | 0.487 | 223                 | 0.0               | 1.0             | 16.082    | C                             |
|          | C-AB   | 172                   | 43                      | 548               | 0.313 | 170                 | 0.0               | 0.5             | 10.405    | B                             |
|          | C-A    | 50                    | 12                      |                   |       | 50                  |                   |                 |           |                               |
|          | A-B    | 411                   | 103                     |                   |       | 411                 |                   |                 |           |                               |
|          | A-C    | 66                    | 17                      |                   |       | 66                  |                   |                 |           |                               |
| 2        | B-AC   | 169                   | 42                      | 512               | 0.329 | 167                 | 0.0               | 0.5             | 11.394    | B                             |
|          | C-AB   | 217                   | 54                      | 638               | 0.341 | 214                 | 0.0               | 0.8             | 9.317     | A                             |
|          | C-A    | 148                   | 37                      |                   |       | 148                 |                   |                 |           |                               |
|          | A-B    | 216                   | 54                      |                   |       | 216                 |                   |                 |           |                               |
|          | A-C    | 344                   | 86                      |                   |       | 344                 |                   |                 |           |                               |

## 00:15 - 00:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 65                    | 16                      | 403               | 0.161 | 64                  | 0.1               | 0.2             | 11.694    | B                             |
|          | B-A    | 271                   | 68                      | 440               | 0.615 | 268                 | 1.0               | 1.7             | 22.662    | C                             |
|          | C-AB   | 212                   | 53                      | 541               | 0.392 | 211                 | 0.5               | 0.8             | 11.992    | B                             |
|          | C-A    | 52                    | 13                      |                   |       | 52                  |                   |                 |           |                               |
|          | A-B    | 491                   | 123                     |                   |       | 491                 |                   |                 |           |                               |
|          | A-C    | 79                    | 20                      |                   |       | 79                  |                   |                 |           |                               |
| 2        | B-AC   | 201                   | 50                      | 476               | 0.423 | 200                 | 0.5               | 0.8             | 14.288    | B                             |
|          | C-AB   | 288                   | 72                      | 650               | 0.443 | 286                 | 0.8               | 1.2             | 10.914    | B                             |
|          | C-A    | 148                   | 37                      |                   |       | 148                 |                   |                 |           |                               |
|          | A-B    | 258                   | 65                      |                   |       | 258                 |                   |                 |           |                               |
|          | A-C    | 411                   | 103                     |                   |       | 411                 |                   |                 |           |                               |

## 00:30 - 00:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 79                    | 20                      | 238               | 0.333 | 78                  | 0.2               | 0.5             | 24.492    | C                             |
|          | B-A    | 331                   | 83                      | 404               | 0.821 | 322                 | 1.7               | 4.0             | 44.029    | E                             |
|          | C-AB   | 273                   | 68                      | 531               | 0.513 | 271                 | 0.8               | 1.3             | 15.145    | C                             |
|          | C-A    | 51                    | 13                      |                   |       | 51                  |                   |                 |           |                               |
|          | A-B    | 601                   | 150                     |                   |       | 601                 |                   |                 |           |                               |
|          | A-C    | 97                    | 24                      |                   |       | 97                  |                   |                 |           |                               |
| 2        | B-AC   | 247                   | 62                      | 425               | 0.580 | 244                 | 0.8               | 1.4             | 21.521    | C                             |
|          | C-AB   | 409                   | 102                     | 668               | 0.612 | 404                 | 1.2               | 2.5             | 15.043    | C                             |
|          | C-A    | 125                   | 31                      |                   |       | 125                 |                   |                 |           |                               |
|          | A-B    | 316                   | 79                      |                   |       | 316                 |                   |                 |           |                               |
|          | A-C    | 503                   | 126                     |                   |       | 503                 |                   |                 |           |                               |

## 00:45 - 01:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 79                    | 20                      | 216               | 0.367 | 79                  | 0.5               | 0.6             | 28.809    | D                             |
|          | B-A    | 331                   | 83                      | 403               | 0.823 | 330                 | 4.0               | 4.4             | 51.618    | F                             |
|          | C-AB   | 273                   | 68                      | 532               | 0.514 | 273                 | 1.3               | 1.3             | 15.366    | C                             |
|          | C-A    | 50                    | 13                      |                   |       | 50                  |                   |                 |           |                               |
|          | A-B    | 601                   | 150                     |                   |       | 601                 |                   |                 |           |                               |
|          | A-C    | 97                    | 24                      |                   |       | 97                  |                   |                 |           |                               |
| 2        | B-AC   | 247                   | 62                      | 424               | 0.581 | 246                 | 1.4               | 1.5             | 22.194    | C                             |
|          | C-AB   | 411                   | 103                     | 670               | 0.613 | 411                 | 2.5               | 2.6             | 15.598    | C                             |
|          | C-A    | 123                   | 31                      |                   |       | 123                 |                   |                 |           |                               |
|          | A-B    | 316                   | 79                      |                   |       | 316                 |                   |                 |           |                               |
|          | A-C    | 503                   | 126                     |                   |       | 503                 |                   |                 |           |                               |

## 01:00 - 01:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 65                    | 16                      | 381               | 0.170 | 66                  | 0.6               | 0.2             | 12.652    | B                             |
|          | B-A    | 271                   | 68                      | 439               | 0.617 | 281                 | 4.4               | 1.9             | 26.466    | D                             |
|          | C-AB   | 213                   | 53                      | 542               | 0.392 | 215                 | 1.3               | 0.8             | 12.204    | B                             |
|          | C-A    | 52                    | 13                      |                   |       | 52                  |                   |                 |           |                               |
|          | A-B    | 491                   | 123                     |                   |       | 491                 |                   |                 |           |                               |
|          | A-C    | 79                    | 20                      |                   |       | 79                  |                   |                 |           |                               |
| 2        | B-AC   | 201                   | 50                      | 475               | 0.424 | 204                 | 1.5               | 0.8             | 14.732    | B                             |
|          | C-AB   | 290                   | 73                      | 653               | 0.445 | 295                 | 2.6               | 1.3             | 11.324    | B                             |
|          | C-A    | 146                   | 36                      |                   |       | 146                 |                   |                 |           |                               |
|          | A-B    | 258                   | 65                      |                   |       | 258                 |                   |                 |           |                               |
|          | A-C    | 411                   | 103                     |                   |       | 411                 |                   |                 |           |                               |

## 01:15 - 01:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 54                    | 14                      | 478               | 0.113 | 55                  | 0.2               | 0.1             | 9.363     | A                             |
|          | B-A    | 227                   | 57                      | 464               | 0.488 | 230                 | 1.9               | 1.1             | 17.133    | C                             |
|          | C-AB   | 172                   | 43                      | 549               | 0.314 | 173                 | 0.8               | 0.6             | 10.582    | B                             |
|          | C-A    | 49                    | 12                      |                   |       | 49                  |                   |                 |           |                               |
|          | A-B    | 411                   | 103                     |                   |       | 411                 |                   |                 |           |                               |
|          | A-C    | 66                    | 17                      |                   |       | 66                  |                   |                 |           |                               |
| 2        | B-AC   | 169                   | 42                      | 511               | 0.330 | 170                 | 0.8               | 0.6             | 11.638    | B                             |
|          | C-AB   | 219                   | 55                      | 639               | 0.342 | 221                 | 1.3               | 0.8             | 9.546     | A                             |
|          | C-A    | 146                   | 37                      |                   |       | 146                 |                   |                 |           |                               |
|          | A-B    | 216                   | 54                      |                   |       | 216                 |                   |                 |           |                               |
|          | A-C    | 344                   | 86                      |                   |       | 344                 |                   |                 |           |                               |

# 2024, PM + DEV

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 59.45              | F            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 6.55               | A            |

### Junction Network

| Driving side | Lighting       | Network residual capacity (%) | First arm reaching threshold | Network delay (s) | Network LOS |
|--------------|----------------|-------------------------------|------------------------------|-------------------|-------------|
| Left         | Normal/unknown | -18                           | Junction 1 - Stream B-A      | 32.06             | D           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2024          | PM + DEV         | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 528                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 455                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 276                     | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 574                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 235                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 543                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      | To |     |     |
|------|----|-----|-----|
|      | A  | B   | C   |
| From | A  | 0   | 401 |
|      | B  | 376 | 0   |
|      | C  | 103 | 173 |

### Demand (PCU/hr)

#### Junction 2

|      | To |     |     |
|------|----|-----|-----|
|      | A  | B   | C   |
| From | A  | 0   | 209 |
|      | B  | 87  | 0   |
|      | C  | 368 | 175 |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|      | To |    |    |    |
|------|----|----|----|----|
|      |    | A  | B  | C  |
| From | A  | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|      | To |    |    |    |
|------|----|----|----|----|
|      |    | A  | B  | C  |
| From | A  | 10 | 10 | 10 |
|      | B  | 10 | 10 | 10 |
|      | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-C    | 1.02    | 240.41        | 5.6             | F       | 72                      | 109                           |
|          | B-A    | 1.01    | 141.63        | 16.0            | F       | 345                     | 518                           |
|          | C-AB   | 0.43    | 12.43         | 0.9             | B       | 192                     | 289                           |
|          | C-A    |         |               |                 |         | 61                      | 91                            |
|          | A-B    |         |               |                 |         | 368                     | 552                           |
|          | A-C    |         |               |                 |         | 117                     | 175                           |
| 2        | B-AC   | 0.58    | 20.85         | 1.5             | C       | 216                     | 323                           |
|          | C-AB   | 0.55    | 11.72         | 2.1             | B       | 309                     | 464                           |
|          | C-A    |         |               |                 |         | 189                     | 283                           |
|          | A-B    |         |               |                 |         | 192                     | 288                           |
|          | A-C    |         |               |                 |         | 335                     | 502                           |

## Main Results for each time segment

### 17:00 - 17:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 59                    | 15                      | 425               | 0.140 | 59                  | 0.0               | 0.2             | 10.791    | B                             |
|          | B-A    | 283                   | 71                      | 473               | 0.598 | 277                 | 0.0               | 1.6             | 19.613    | C                             |
|          | C-AB   | 151                   | 38                      | 567               | 0.266 | 149                 | 0.0               | 0.4             | 9.436     | A                             |
|          | C-A    | 57                    | 14                      |                   |       | 57                  |                   |                 |           |                               |
|          | A-B    | 302                   | 75                      |                   |       | 302                 |                   |                 |           |                               |
|          | A-C    | 96                    | 24                      |                   |       | 96                  |                   |                 |           |                               |
| 2        | B-AC   | 177                   | 44                      | 525               | 0.337 | 175                 | 0.0               | 0.5             | 11.226    | B                             |
|          | C-AB   | 218                   | 54                      | 701               | 0.311 | 215                 | 0.0               | 0.7             | 8.129     | A                             |
|          | C-A    | 191                   | 48                      |                   |       | 191                 |                   |                 |           |                               |
|          | A-B    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |
|          | A-C    | 275                   | 69                      |                   |       | 275                 |                   |                 |           |                               |

### 17:15 - 17:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 71                    | 18                      | 299               | 0.237 | 70                  | 0.2               | 0.3             | 17.264    | C                             |
|          | B-A    | 338                   | 85                      | 448               | 0.754 | 332                 | 1.6               | 3.0             | 32.545    | D                             |
|          | C-AB   | 186                   | 47                      | 564               | 0.331 | 186                 | 0.4               | 0.6             | 10.472    | B                             |
|          | C-A    | 62                    | 15                      |                   |       | 62                  |                   |                 |           |                               |
|          | A-B    | 360                   | 90                      |                   |       | 360                 |                   |                 |           |                               |
|          | A-C    | 114                   | 29                      |                   |       | 114                 |                   |                 |           |                               |
| 2        | B-AC   | 211                   | 53                      | 494               | 0.428 | 210                 | 0.5               | 0.8             | 13.910    | B                             |
|          | C-AB   | 291                   | 73                      | 725               | 0.401 | 290                 | 0.7               | 1.1             | 9.116     | A                             |
|          | C-A    | 197                   | 49                      |                   |       | 197                 |                   |                 |           |                               |
|          | A-B    | 188                   | 47                      |                   |       | 188                 |                   |                 |           |                               |
|          | A-C    | 328                   | 82                      |                   |       | 328                 |                   |                 |           |                               |

### 17:30 - 17:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 87                    | 22                      | 85                | 1.017 | 70                  | 0.3               | 4.6             | 180.170   | F                             |
|          | B-A    | 414                   | 103                     | 412               | 1.004 | 382                 | 3.0               | 10.9            | 87.119    | F                             |
|          | C-AB   | 240                   | 60                      | 559               | 0.428 | 238                 | 0.6               | 0.9             | 12.331    | B                             |
|          | C-A    | 64                    | 16                      |                   |       | 64                  |                   |                 |           |                               |
|          | A-B    | 442                   | 110                     |                   |       | 442                 |                   |                 |           |                               |
|          | A-C    | 140                   | 35                      |                   |       | 140                 |                   |                 |           |                               |
| 2        | B-AC   | 259                   | 65                      | 449               | 0.577 | 256                 | 0.8               | 1.4             | 20.300    | C                             |
|          | C-AB   | 417                   | 104                     | 760               | 0.548 | 413                 | 1.1               | 2.0             | 11.468    | B                             |
|          | C-A    | 181                   | 45                      |                   |       | 181                 |                   |                 |           |                               |
|          | A-B    | 230                   | 58                      |                   |       | 230                 |                   |                 |           |                               |
|          | A-C    | 402                   | 100                     |                   |       | 402                 |                   |                 |           |                               |

**17:45 - 18:00**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 87                    | 22                      | 94                | 0.925 | 83                  | 4.6               | 5.6             | 240.407   | F                             |
|          | B-A    | 414                   | 103                     | 408               | 1.014 | 394                 | 10.9              | 16.0            | 141.629   | F                             |
|          | C-AB   | 240                   | 60                      | 559               | 0.429 | 240                 | 0.9               | 0.9             | 12.426    | B                             |
|          | C-A    | 64                    | 16                      |                   |       | 64                  |                   |                 |           |                               |
|          | A-B    | 442                   | 110                     |                   |       | 442                 |                   |                 |           |                               |
|          | A-C    | 140                   | 35                      |                   |       | 140                 |                   |                 |           |                               |
| 2        | B-AC   | 259                   | 65                      | 448               | 0.577 | 259                 | 1.4               | 1.5             | 20.854    | C                             |
|          | C-AB   | 419                   | 105                     | 762               | 0.550 | 418                 | 2.0               | 2.1             | 11.718    | B                             |
|          | C-A    | 179                   | 45                      |                   |       | 179                 |                   |                 |           |                               |
|          | A-B    | 230                   | 58                      |                   |       | 230                 |                   |                 |           |                               |
|          | A-C    | 402                   | 100                     |                   |       | 402                 |                   |                 |           |                               |

**18:00 - 18:15**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 71                    | 18                      | 178               | 0.399 | 90                  | 5.6               | 0.8             | 53.032    | F                             |
|          | B-A    | 338                   | 85                      | 439               | 0.770 | 384                 | 16.0              | 4.5             | 84.770    | F                             |
|          | C-AB   | 187                   | 47                      | 564               | 0.331 | 188                 | 0.9               | 0.6             | 10.580    | B                             |
|          | C-A    | 61                    | 15                      |                   |       | 61                  |                   |                 |           |                               |
|          | A-B    | 360                   | 90                      |                   |       | 360                 |                   |                 |           |                               |
|          | A-C    | 114                   | 29                      |                   |       | 114                 |                   |                 |           |                               |
| 2        | B-AC   | 211                   | 53                      | 493               | 0.429 | 214                 | 1.5               | 0.8             | 14.307    | B                             |
|          | C-AB   | 293                   | 73                      | 728               | 0.403 | 297                 | 2.1               | 1.2             | 9.337     | A                             |
|          | C-A    | 195                   | 49                      |                   |       | 195                 |                   |                 |           |                               |
|          | A-B    | 188                   | 47                      |                   |       | 188                 |                   |                 |           |                               |
|          | A-C    | 328                   | 82                      |                   |       | 328                 |                   |                 |           |                               |

**18:15 - 18:30**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 59                    | 15                      | 399               | 0.149 | 62                  | 0.8               | 0.2             | 11.822    | B                             |
|          | B-A    | 283                   | 71                      | 472               | 0.600 | 294                 | 4.5               | 1.7             | 23.537    | C                             |
|          | C-AB   | 151                   | 38                      | 568               | 0.266 | 152                 | 0.6               | 0.5             | 9.549     | A                             |
|          | C-A    | 57                    | 14                      |                   |       | 57                  |                   |                 |           |                               |
|          | A-B    | 302                   | 75                      |                   |       | 302                 |                   |                 |           |                               |
|          | A-C    | 96                    | 24                      |                   |       | 96                  |                   |                 |           |                               |
| 2        | B-AC   | 177                   | 44                      | 525               | 0.337 | 178                 | 0.8               | 0.6             | 11.466    | B                             |
|          | C-AB   | 220                   | 55                      | 703               | 0.312 | 221                 | 1.2               | 0.7             | 8.286     | A                             |
|          | C-A    | 189                   | 47                      |                   |       | 189                 |                   |                 |           |                               |
|          | A-B    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |
|          | A-C    | 275                   | 69                      |                   |       | 275                 |                   |                 |           |                               |

| Junctions 10                                                                                                                                                     |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| PICADY 10 - Priority Intersection Module                                                                                                                         |  |  |  |  |  |  |  |
| Version: 10.1.1.1905                                                                                                                                             |  |  |  |  |  |  |  |
| © Copyright TRL Software Limited, 2023                                                                                                                           |  |  |  |  |  |  |  |
| For sales and distribution information, program advice and maintenance, contact TRL Software:                                                                    |  |  |  |  |  |  |  |
| +44 (0)1344 379777 software@trl.co.uk trlsoftware.com                                                                                                            |  |  |  |  |  |  |  |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |  |  |  |  |  |  |

Filename: 2024 Base AM.j10

Path: Z:\Documents\PARAGON HIGHWAYS\Bromley Farm Quarry\PICADY\PICADY New Mill\PICADY Custom

Report generation date: 1/7/2025 2:28:17 PM

## «2024, AM BASE

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

## Summary of junction performance

|                          | AM BASE     |           |      |     |                                    |
|--------------------------|-------------|-----------|------|-----|------------------------------------|
|                          | Queue (PCU) | Delay (s) | RFC  | LOS | Network Residual Capacity          |
|                          | 2024        |           |      |     |                                    |
| Junction 1 - Stream B-C  | 3.7         | 204.30    | 0.94 | F   | -18 %<br>[Junction 1 - Stream B-A] |
| Junction 1 - Stream B-A  | 9.5         | 109.51    | 0.95 | F   |                                    |
| Junction 1 - Stream C-AB | 1.1         | 14.29     | 0.48 | B   |                                    |
| Junction 2 - Stream B-AC | 7.4         | 114.89    | 0.93 | F   |                                    |
| Junction 2 - Stream C-AB | 2.4         | 15.32     | 0.60 | C   |                                    |

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

## File summary

### File Description

|             |                             |
|-------------|-----------------------------|
| Title       | Bromley Farm Quarry         |
| Location    | New Mill Junction A616 A635 |
| Site number | 2074                        |
| Date        | 12/17/2024                  |
| Version     |                             |
| Status      |                             |
| Identifier  |                             |
| Client      | SE                          |
| Jobnumber   | 2074C                       |
| Enumerator  | JH                          |
| Description | 2024 Base Standard          |

## Units

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

### Analysis Options

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

### Analysis Set Details

| ID | Include in report | Network flow scaling factor (%) | Network capacity scaling factor (%) |
|----|-------------------|---------------------------------|-------------------------------------|
| AL | ✓                 | 100.000                         | 100.000                             |

# 2024, AM BASE

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 37.69              | E            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 21.54              | C            |

### Junction Network

| Driving side | Lighting       | Network residual capacity (%) | First arm reaching threshold | Network delay (s) | Network LOS |
|--------------|----------------|-------------------------------|------------------------------|-------------------|-------------|
| Left         | Normal/unknown | -18                           | Junction 1 - Stream B-A      | 29.16             | D           |

## Arms

### Arms

| Junction | Arm | Name                   | Description | Arm type |
|----------|-----|------------------------|-------------|----------|
| 1        | A   | A635 Holmfirth Road    |             | Major    |
|          | B   | A616 Penistone Road    |             | Minor    |
|          | C   | A616 Sheffield Road    |             | Major    |
| 2        | A   | A635 Penistone Road    |             | Major    |
|          | B   | A616 Huddersfield Road |             | Minor    |
|          | C   | A635 Penistone Road    |             | Major    |

### Major Arm Geometry

| Junction | Arm | Width of carriageway (m) | Has kerbed central reserve | Has right-turn storage | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|----------|-----|--------------------------|----------------------------|------------------------|-------------------------------|---------|----------------------|
| 1        | C   | 8.95                     |                            |                        | 30.0                          | ✓       | 0.00                 |
| 2        | C   | 6.60                     |                            |                        | 43.0                          | ✓       | 0.00                 |

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

### Minor Arm Geometry

| Junction | Arm | Minor arm type      | Lane width (m) | 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) |
|----------|-----|---------------------|----------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| 1        | B   | One lane plus flare |                | 10.00                 | 5.20            | 3.80             | 3.80             | 3.30             | ✓                     | 1.00               | 32                     | 80                      |
| 2        | B   | One lane            | 4.52           |                       |                 |                  |                  |                  |                       |                    | 20                     | 35                      |

### Slope / Intercept / Capacity

#### Custom Intercept Adjustments

| Junction | Custom stream intercept adjustment | Stream | Use adjustment | Reason       | Direct intercept adjustment (PCU/hr) |
|----------|------------------------------------|--------|----------------|--------------|--------------------------------------|
| 1        | 1                                  | B-A    | ✓              | Queue Length | -62                                  |
| 2        | 1                                  | B-A    | ✓              | Queue Length | -160                                 |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 1        | B-A    | 521                | 0.093         | 0.234         | 0.147         | 0.334         |
|          | B-C    | 669                | 0.089         | 0.226         | -             | -             |
|          | C-B    | 591                | 0.200         | 0.200         | -             | -             |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 2        | B-A    | 418                | 0.102         | 0.259         | 0.163         | 0.370         |
|          | B-C    | 744                | 0.111         | 0.281         | -             | -             |
|          | C-B    | 599                | 0.226         | 0.226         | -             | -             |

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

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

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2024          | AM BASE          | ONE HOUR             | 00:00              | 01:30               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 634                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 359                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 280                     | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 730                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 224                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 471                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      | To |     |     |    |
|------|----|-----|-----|----|
|      |    | A   | B   | C  |
| From | A  | 0   | 546 | 88 |
|      | B  | 301 | 0   | 58 |
|      | C  | 96  | 184 | 0  |

### Demand (PCU/hr)

#### Junction 2

|      | To |     |     |     |
|------|----|-----|-----|-----|
|      |    | A   | B   | C   |
| From | A  | 0   | 287 | 443 |
|      | B  | 75  | 0   | 149 |
|      | C  | 284 | 187 | 0   |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|  | To |    |    |    |
|--|----|----|----|----|
|  |    | A  | B  | C  |
|  | A  | 10 | 10 | 10 |
|  | B  | 10 | 10 | 10 |
|  | C  | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|  | To |    |    |    |
|--|----|----|----|----|
|  |    | A  | B  | C  |
|  | A  | 10 | 10 | 10 |
|  | B  | 10 | 10 | 10 |
|  | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-C    | 0.94    | 204.30        | 3.7             | F       | 53                      | 80                            |
|          | B-A    | 0.95    | 109.51        | 9.5             | F       | 276                     | 414                           |
|          | C-AB   | 0.48    | 14.29         | 1.1             | B       | 204                     | 305                           |
|          | C-A    |         |               |                 |         | 53                      | 80                            |
|          | A-B    |         |               |                 |         | 501                     | 752                           |
|          | A-C    |         |               |                 |         | 81                      | 121                           |
| 2        | B-AC   | 0.93    | 114.89        | 7.4             | F       | 206                     | 308                           |
|          | C-AB   | 0.60    | 15.32         | 2.4             | C       | 297                     | 446                           |
|          | C-A    |         |               |                 |         | 135                     | 202                           |
|          | A-B    |         |               |                 |         | 263                     | 395                           |
|          | A-C    |         |               |                 |         | 407                     | 610                           |

### Main Results for each time segment

00:00 - 00:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 44                    | 11                      | 446               | 0.098 | 43                  | 0.0               | 0.1             | 9.828     | A                             |
|          | B-A    | 227                   | 57                      | 409               | 0.555 | 221                 | 0.0               | 1.3             | 20.628    | C                             |
|          | C-AB   | 160                   | 40                      | 548               | 0.291 | 158                 | 0.0               | 0.5             | 10.094    | B                             |
|          | C-A    | 51                    | 13                      |                   |       | 51                  |                   |                 |           |                               |
|          | A-B    | 411                   | 103                     |                   |       | 411                 |                   |                 |           |                               |
|          | A-C    | 66                    | 17                      |                   |       | 66                  |                   |                 |           |                               |
| 2        | B-AC   | 169                   | 42                      | 389               | 0.433 | 165                 | 0.0               | 0.8             | 17.447    | C                             |
|          | C-AB   | 213                   | 53                      | 632               | 0.337 | 210                 | 0.0               | 0.7             | 9.346     | A                             |
|          | C-A    | 142                   | 35                      |                   |       | 142                 |                   |                 |           |                               |
|          | A-B    | 216                   | 54                      |                   |       | 216                 |                   |                 |           |                               |
|          | A-C    | 334                   | 83                      |                   |       | 334                 |                   |                 |           |                               |

**00:15 - 00:30**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 52                    | 13                      | 331               | 0.158 | 52                  | 0.1               | 0.2             | 14.173    | B                             |
|          | B-A    | 271                   | 68                      | 385               | 0.703 | 266                 | 1.3               | 2.3             | 32.253    | D                             |
|          | C-AB   | 197                   | 49                      | 541               | 0.364 | 196                 | 0.5               | 0.7             | 11.478    | B                             |
|          | C-A    | 55                    | 14                      |                   |       | 55                  |                   |                 |           |                               |
|          | A-B    | 491                   | 123                     |                   |       | 491                 |                   |                 |           |                               |
|          | A-C    | 79                    | 20                      |                   |       | 79                  |                   |                 |           |                               |
| 2        | B-AC   | 201                   | 50                      | 342               | 0.590 | 199                 | 0.8               | 1.5             | 27.220    | D                             |
|          | C-AB   | 280                   | 70                      | 643               | 0.436 | 279                 | 0.7               | 1.2             | 10.907    | B                             |
|          | C-A    | 143                   | 36                      |                   |       | 143                 |                   |                 |           |                               |
|          | A-B    | 258                   | 65                      |                   |       | 258                 |                   |                 |           |                               |
|          | A-C    | 398                   | 100                     |                   |       | 398                 |                   |                 |           |                               |

**00:30 - 00:45**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 64                    | 16                      | 96                | 0.663 | 58                  | 0.2               | 1.6             | 94.006    | F                             |
|          | B-A    | 331                   | 83                      | 351               | 0.944 | 312                 | 2.3               | 7.3             | 76.553    | F                             |
|          | C-AB   | 254                   | 63                      | 531               | 0.477 | 252                 | 0.7               | 1.1             | 14.131    | B                             |
|          | C-A    | 55                    | 14                      |                   |       | 55                  |                   |                 |           |                               |
|          | A-B    | 601                   | 150                     |                   |       | 601                 |                   |                 |           |                               |
|          | A-C    | 97                    | 24                      |                   |       | 97                  |                   |                 |           |                               |
| 2        | B-AC   | 247                   | 62                      | 268               | 0.920 | 230                 | 1.5               | 5.7             | 80.798    | F                             |
|          | C-AB   | 395                   | 99                      | 659               | 0.600 | 391                 | 1.2               | 2.3             | 14.829    | B                             |
|          | C-A    | 123                   | 31                      |                   |       | 123                 |                   |                 |           |                               |
|          | A-B    | 316                   | 79                      |                   |       | 316                 |                   |                 |           |                               |
|          | A-C    | 488                   | 122                     |                   |       | 488                 |                   |                 |           |                               |

**00:45 - 01:00**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 64                    | 16                      | 68                | 0.937 | 56                  | 1.6               | 3.7             | 204.299   | F                             |
|          | B-A    | 331                   | 83                      | 349               | 0.949 | 323                 | 7.3               | 9.5             | 109.514   | F                             |
|          | C-AB   | 254                   | 63                      | 532               | 0.477 | 254                 | 1.1               | 1.1             | 14.295    | B                             |
|          | C-A    | 54                    | 14                      |                   |       | 54                  |                   |                 |           |                               |
|          | A-B    | 601                   | 150                     |                   |       | 601                 |                   |                 |           |                               |
|          | A-C    | 97                    | 24                      |                   |       | 97                  |                   |                 |           |                               |
| 2        | B-AC   | 247                   | 62                      | 266               | 0.926 | 240                 | 5.7               | 7.4             | 114.891   | F                             |
|          | C-AB   | 398                   | 99                      | 661               | 0.602 | 397                 | 2.3               | 2.4             | 15.322    | C                             |
|          | C-A    | 121                   | 30                      |                   |       | 121                 |                   |                 |           |                               |
|          | A-B    | 316                   | 79                      |                   |       | 316                 |                   |                 |           |                               |
|          | A-C    | 488                   | 122                     |                   |       | 488                 |                   |                 |           |                               |

**01:00 - 01:15**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 52                    | 13                      | 259               | 0.201 | 66                  | 3.7               | 0.3             | 21.842    | C                             |
|          | B-A    | 271                   | 68                      | 381               | 0.711 | 296                 | 9.5               | 3.1             | 55.030    | F                             |
|          | C-AB   | 198                   | 49                      | 542               | 0.365 | 199                 | 1.1               | 0.7             | 11.640    | B                             |
|          | C-A    | 54                    | 14                      |                   |       | 54                  |                   |                 |           |                               |
|          | A-B    | 491                   | 123                     |                   |       | 491                 |                   |                 |           |                               |
|          | A-C    | 79                    | 20                      |                   |       | 79                  |                   |                 |           |                               |
| 2        | B-AC   | 201                   | 50                      | 340               | 0.593 | 224                 | 7.4               | 1.7             | 39.525    | E                             |
|          | C-AB   | 283                   | 71                      | 645               | 0.438 | 287                 | 2.4               | 1.3             | 11.285    | B                             |
|          | C-A    | 141                   | 35                      |                   |       | 141                 |                   |                 |           |                               |
|          | A-B    | 258                   | 65                      |                   |       | 258                 |                   |                 |           |                               |
|          | A-C    | 398                   | 100                     |                   |       | 398                 |                   |                 |           |                               |

## 01:15 - 01:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 44                    | 11                      | 426               | 0.102 | 44                  | 0.3               | 0.1             | 10.379    | B                             |
|          | B-A    | 227                   | 57                      | 408               | 0.556 | 233                 | 3.1               | 1.4             | 23.449    | C                             |
|          | C-AB   | 160                   | 40                      | 549               | 0.291 | 161                 | 0.7               | 0.5             | 10.243    | B                             |
|          | C-A    | 51                    | 13                      |                   |       | 51                  |                   |                 |           |                               |
|          | A-B    | 411                   | 103                     |                   |       | 411                 |                   |                 |           |                               |
|          | A-C    | 66                    | 17                      |                   |       | 66                  |                   |                 |           |                               |
| 2        | B-AC   | 169                   | 42                      | 388               | 0.435 | 172                 | 1.7               | 0.9             | 18.634    | C                             |
|          | C-AB   | 214                   | 54                      | 634               | 0.338 | 216                 | 1.3               | 0.8             | 9.568     | A                             |
|          | C-A    | 140                   | 35                      |                   |       | 140                 |                   |                 |           |                               |
|          | A-B    | 216                   | 54                      |                   |       | 216                 |                   |                 |           |                               |
|          | A-C    | 334                   | 83                      |                   |       | 334                 |                   |                 |           |                               |

| Junctions 10                                                                                                                                                     |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| PICADY 10 - Priority Intersection Module                                                                                                                         |  |  |  |  |  |  |  |
| Version: 10.1.1.1905                                                                                                                                             |  |  |  |  |  |  |  |
| © Copyright TRL Software Limited, 2023                                                                                                                           |  |  |  |  |  |  |  |
| For sales and distribution information, program advice and maintenance, contact TRL Software:                                                                    |  |  |  |  |  |  |  |
| +44 (0)1344 379777    software@trl.co.uk    trlsoftware.com                                                                                                      |  |  |  |  |  |  |  |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |  |  |  |  |  |  |

Filename: 2024 Base PM.j10

Path: Z:\Documents\PARAGON HIGHWAYS\Bromley Farm Quarry\PICADY\PICADY New Mill\PICADY Custom

Report generation date: 1/7/2025 2:42:30 PM

## «2024, PM BASE

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

## Summary of junction performance

|                          | PM BASE     |           |      |     |                                    |
|--------------------------|-------------|-----------|------|-----|------------------------------------|
|                          | Queue (PCU) | Delay (s) | RFC  | LOS | Network Residual Capacity          |
| 2024                     |             |           |      |     |                                    |
| Junction 1 - Stream B-C  | 4.0         | 204.29    | 0.92 | F   | -15 %<br>[Junction 1 - Stream B-A] |
| Junction 1 - Stream B-A  | 11.3        | 103.42    | 0.96 | F   |                                    |
| Junction 1 - Stream C-AB | 0.8         | 11.71     | 0.39 | B   |                                    |
| Junction 2 - Stream B-AC | 6.9         | 102.55    | 0.91 | F   |                                    |
| Junction 2 - Stream C-AB | 2.0         | 11.58     | 0.54 | B   |                                    |

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

## File summary

### File Description

|             |                             |
|-------------|-----------------------------|
| Title       | Bromley Farm Quarry         |
| Location    | New Mill Junction A616 A635 |
| Site number | 2074                        |
| Date        | 12/17/2024                  |
| Version     |                             |
| Status      |                             |
| Identifier  |                             |
| Client      | SE                          |
| Jobnumber   | 2074C                       |
| Enumerator  | JH                          |
| Description | 2024 Base Standard          |

## Units

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

### Analysis Options

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

### Analysis Set Details

| ID | Include in report | Network flow scaling factor (%) | Network capacity scaling factor (%) |
|----|-------------------|---------------------------------|-------------------------------------|
| AL | ✓                 | 100.000                         | 100.000                             |

# 2024, PM BASE

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 44.21              | E            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 21.07              | C            |

### Junction Network

| Driving side | Lighting       | Network residual capacity (%) | First arm reaching threshold | Network delay (s) | Network LOS |
|--------------|----------------|-------------------------------|------------------------------|-------------------|-------------|
| Left         | Normal/unknown | -15                           | Junction 1 - Stream B-A      | 32.22             | D           |

## Arms

### Arms

| Junction | Arm | Name                   | Description | Arm type |
|----------|-----|------------------------|-------------|----------|
| 1        | A   | A635 Holmfirth Road    |             | Major    |
|          | B   | A616 Penistone Road    |             | Minor    |
|          | C   | A616 Sheffield Road    |             | Major    |
| 2        | A   | A635 Penistone Road    |             | Major    |
|          | B   | A616 Huddersfield Road |             | Minor    |
|          | C   | A635 Penistone Road    |             | Major    |

### Major Arm Geometry

| Junction | Arm | Width of carriageway (m) | Has kerbed central reserve | Has right-turn storage | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|----------|-----|--------------------------|----------------------------|------------------------|-------------------------------|---------|----------------------|
| 1        | C   | 8.95                     |                            |                        | 30.0                          | ✓       | 0.00                 |
| 2        | C   | 6.60                     |                            |                        | 43.0                          | ✓       | 0.00                 |

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

### Minor Arm Geometry

| Junction | Arm | Minor arm type      | Lane width (m) | 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) |
|----------|-----|---------------------|----------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| 1        | B   | One lane plus flare |                | 10.00                 | 5.20            | 3.80             | 3.80             | 3.30             | ✓                     | 1.00               | 32                     | 80                      |
| 2        | B   | One lane            | 4.52           |                       |                 |                  |                  |                  |                       |                    | 20                     | 35                      |

### Slope / Intercept / Capacity

#### Custom Intercept Adjustments

| Junction | Custom stream intercept adjustment | Stream | Use adjustment | Reason       | Direct intercept adjustment (PCU/hr) |
|----------|------------------------------------|--------|----------------|--------------|--------------------------------------|
| 1        | 1                                  | B-A    | ✓              | Queue Length | 10                                   |
| 2        | 1                                  | B-A    | ✓              | Queue Length | -168                                 |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 1        | B-A    | 594                | 0.093         | 0.234         | 0.147         | 0.335         |
|          | B-C    | 666                | 0.089         | 0.225         | -             | -             |
|          | C-B    | 591                | 0.200         | 0.200         | -             | -             |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 2        | B-A    | 410                | 0.102         | 0.259         | 0.163         | 0.370         |
|          | B-C    | 744                | 0.111         | 0.281         | -             | -             |
|          | C-B    | 599                | 0.226         | 0.226         | -             | -             |

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

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

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2024          | PM BASE          | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 528                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 441                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 262                     | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 560                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 235                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 529                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      | To |     |     |     |
|------|----|-----|-----|-----|
|      |    | A   | B   | C   |
| From | A  | 0   | 401 | 127 |
|      | B  | 376 | 0   | 65  |
|      | C  | 103 | 159 | 0   |
|      |    |     |     |     |

### Demand (PCU/hr)

#### Junction 2

|      | To |     |     |     |
|------|----|-----|-----|-----|
|      |    | A   | B   | C   |
| From | A  | 0   | 209 | 351 |
|      | B  | 87  | 0   | 148 |
|      | C  | 354 | 175 | 0   |
|      |    |     |     |     |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|  | To |    |    |    |
|--|----|----|----|----|
|  |    | A  | B  | C  |
|  | A  | 10 | 10 | 10 |
|  | B  | 10 | 10 | 10 |
|  | C  | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|  | To |    |    |    |
|--|----|----|----|----|
|  |    | A  | B  | C  |
|  | A  | 10 | 10 | 10 |
|  | B  | 10 | 10 | 10 |
|  | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-C    | 0.92    | 204.29        | 4.0             | F       | 60                      | 89                            |
|          | B-A    | 0.96    | 103.42        | 11.3            | F       | 345                     | 518                           |
|          | C-AB   | 0.39    | 11.71         | 0.8             | B       | 177                     | 265                           |
|          | C-A    |         |               |                 |         | 64                      | 95                            |
|          | A-B    |         |               |                 |         | 368                     | 552                           |
|          | A-C    |         |               |                 |         | 117                     | 175                           |
| 2        | B-AC   | 0.91    | 102.55        | 6.9             | F       | 216                     | 323                           |
|          | C-AB   | 0.54    | 11.58         | 2.0             | B       | 301                     | 452                           |
|          | C-A    |         |               |                 |         | 184                     | 276                           |
|          | A-B    |         |               |                 |         | 192                     | 288                           |
|          | A-C    |         |               |                 |         | 322                     | 483                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 49                    | 12                      | 433               | 0.113 | 48                  | 0.0               | 0.1             | 10.293    | B                             |
|          | B-A    | 283                   | 71                      | 489               | 0.579 | 277                 | 0.0               | 1.4             | 18.247    | C                             |
|          | C-AB   | 139                   | 35                      | 567               | 0.244 | 137                 | 0.0               | 0.4             | 9.177     | A                             |
|          | C-A    | 59                    | 15                      |                   |       | 59                  |                   |                 |           |                               |
|          | A-B    | 302                   | 75                      |                   |       | 302                 |                   |                 |           |                               |
|          | A-C    | 96                    | 24                      |                   |       | 96                  |                   |                 |           |                               |
| 2        | B-AC   | 177                   | 44                      | 391               | 0.452 | 173                 | 0.0               | 0.9             | 17.900    | C                             |
|          | C-AB   | 214                   | 53                      | 696               | 0.307 | 211                 | 0.0               | 0.7             | 8.146     | A                             |
|          | C-A    | 185                   | 46                      |                   |       | 185                 |                   |                 |           |                               |
|          | A-B    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |
|          | A-C    | 264                   | 66                      |                   |       | 264                 |                   |                 |           |                               |

**17:15 - 17:30**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 58                    | 15                      | 317               | 0.184 | 58                  | 0.1               | 0.2             | 15.256    | C                             |
|          | B-A    | 338                   | 85                      | 466               | 0.725 | 333                 | 1.4               | 2.6             | 28.758    | D                             |
|          | C-AB   | 171                   | 43                      | 564               | 0.304 | 171                 | 0.4               | 0.5             | 10.074    | B                             |
|          | C-A    | 64                    | 16                      |                   |       | 64                  |                   |                 |           |                               |
|          | A-B    | 360                   | 90                      |                   |       | 360                 |                   |                 |           |                               |
|          | A-C    | 114                   | 29                      |                   |       | 114                 |                   |                 |           |                               |
| 2        | B-AC   | 211                   | 53                      | 349               | 0.605 | 208                 | 0.9               | 1.6             | 27.601    | D                             |
|          | C-AB   | 284                   | 71                      | 718               | 0.396 | 283                 | 0.7               | 1.1             | 9.116     | A                             |
|          | C-A    | 191                   | 48                      |                   |       | 191                 |                   |                 |           |                               |
|          | A-B    | 188                   | 47                      |                   |       | 188                 |                   |                 |           |                               |
|          | A-C    | 316                   | 79                      |                   |       | 316                 |                   |                 |           |                               |

**17:30 - 17:45**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 72                    | 18                      | 92                | 0.775 | 63                  | 0.2               | 2.3             | 116.608   | F                             |
|          | B-A    | 414                   | 103                     | 432               | 0.957 | 390                 | 2.6               | 8.5             | 70.340    | F                             |
|          | C-AB   | 220                   | 55                      | 559               | 0.394 | 219                 | 0.5               | 0.8             | 11.640    | B                             |
|          | C-A    | 68                    | 17                      |                   |       | 68                  |                   |                 |           |                               |
|          | A-B    | 442                   | 110                     |                   |       | 442                 |                   |                 |           |                               |
|          | A-C    | 140                   | 35                      |                   |       | 140                 |                   |                 |           |                               |
| 2        | B-AC   | 259                   | 65                      | 286               | 0.906 | 243                 | 1.6               | 5.5             | 74.750    | F                             |
|          | C-AB   | 404                   | 101                     | 751               | 0.538 | 401                 | 1.1               | 1.9             | 11.351    | B                             |
|          | C-A    | 178                   | 45                      |                   |       | 178                 |                   |                 |           |                               |
|          | A-B    | 230                   | 58                      |                   |       | 230                 |                   |                 |           |                               |
|          | A-C    | 386                   | 97                      |                   |       | 386                 |                   |                 |           |                               |

**17:45 - 18:00**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 72                    | 18                      | 78                | 0.923 | 65                  | 2.3               | 4.0             | 204.291   | F                             |
|          | B-A    | 414                   | 103                     | 430               | 0.963 | 403                 | 8.5               | 11.3            | 103.419   | F                             |
|          | C-AB   | 220                   | 55                      | 559               | 0.394 | 220                 | 0.8               | 0.8             | 11.714    | B                             |
|          | C-A    | 68                    | 17                      |                   |       | 68                  |                   |                 |           |                               |
|          | A-B    | 442                   | 110                     |                   |       | 442                 |                   |                 |           |                               |
|          | A-C    | 140                   | 35                      |                   |       | 140                 |                   |                 |           |                               |
| 2        | B-AC   | 259                   | 65                      | 284               | 0.910 | 253                 | 5.5               | 6.9             | 102.545   | F                             |
|          | C-AB   | 406                   | 101                     | 753               | 0.539 | 406                 | 1.9               | 2.0             | 11.577    | B                             |
|          | C-A    | 177                   | 44                      |                   |       | 177                 |                   |                 |           |                               |
|          | A-B    | 230                   | 58                      |                   |       | 230                 |                   |                 |           |                               |
|          | A-C    | 386                   | 97                      |                   |       | 386                 |                   |                 |           |                               |

**18:00 - 18:15**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 58                    | 15                      | 244               | 0.239 | 73                  | 4.0               | 0.4             | 24.950    | C                             |
|          | B-A    | 338                   | 85                      | 461               | 0.734 | 369                 | 11.3              | 3.5             | 51.690    | F                             |
|          | C-AB   | 172                   | 43                      | 564               | 0.304 | 173                 | 0.8               | 0.6             | 10.157    | B                             |
|          | C-A    | 64                    | 16                      |                   |       | 64                  |                   |                 |           |                               |
|          | A-B    | 360                   | 90                      |                   |       | 360                 |                   |                 |           |                               |
|          | A-C    | 114                   | 29                      |                   |       | 114                 |                   |                 |           |                               |
| 2        | B-AC   | 211                   | 53                      | 348               | 0.608 | 231                 | 6.9               | 1.8             | 38.618    | E                             |
|          | C-AB   | 286                   | 72                      | 721               | 0.397 | 290                 | 2.0               | 1.1             | 9.322     | A                             |
|          | C-A    | 190                   | 47                      |                   |       | 190                 |                   |                 |           |                               |
|          | A-B    | 188                   | 47                      |                   |       | 188                 |                   |                 |           |                               |
|          | A-C    | 316                   | 79                      |                   |       | 316                 |                   |                 |           |                               |

**18:15 - 18:30**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 49                    | 12                      | 414               | 0.118 | 50                  | 0.4               | 0.1             | 10.897    | B                             |
|          | B-A    | 283                   | 71                      | 488               | 0.580 | 291                 | 3.5               | 1.6             | 20.720    | C                             |
|          | C-AB   | 139                   | 35                      | 568               | 0.245 | 140                 | 0.6               | 0.4             | 9.270     | A                             |
|          | C-A    | 58                    | 15                      |                   |       | 58                  |                   |                 |           |                               |
|          | A-B    | 302                   | 75                      |                   |       | 302                 |                   |                 |           |                               |
|          | A-C    | 96                    | 24                      |                   |       | 96                  |                   |                 |           |                               |
| 2        | B-AC   | 177                   | 44                      | 390               | 0.454 | 181                 | 1.8               | 0.9             | 19.203    | C                             |
|          | C-AB   | 215                   | 54                      | 697               | 0.309 | 217                 | 1.1               | 0.7             | 8.303     | A                             |
|          | C-A    | 183                   | 46                      |                   |       | 183                 |                   |                 |           |                               |
|          | A-B    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |
|          | A-C    | 264                   | 66                      |                   |       | 264                 |                   |                 |           |                               |

| Junctions 10                                                                                                                                                     |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| PICADY 10 - Priority Intersection Module                                                                                                                         |  |  |  |  |  |  |  |
| Version: 10.1.1.1905                                                                                                                                             |  |  |  |  |  |  |  |
| © Copyright TRL Software Limited, 2023                                                                                                                           |  |  |  |  |  |  |  |
| For sales and distribution information, program advice and maintenance, contact TRL Software:                                                                    |  |  |  |  |  |  |  |
| +44 (0)1344 379777    software@trl.co.uk    trlsoftware.com                                                                                                      |  |  |  |  |  |  |  |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |  |  |  |  |  |  |

Filename: 2024 With Quarry Traffic AM Custom.j10

Path: Z:\Documents\PARAGON HIGHWAYS\Bromley Farm Quarry\PICADY\PICADY New Mill\PICADY Custom

Report generation date: 1/7/2025 4:52:16 PM

## «2024, AM + DEV

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

## Summary of junction performance

|                          | AM + DEV    |           |      |     |                                    |
|--------------------------|-------------|-----------|------|-----|------------------------------------|
|                          | Queue (PCU) | Delay (s) | RFC  | LOS | Network Residual Capacity          |
| 2024                     |             |           |      |     |                                    |
| Junction 1 - Stream B-C  | 4.9         | 226.36    | 0.99 | F   | -19 %<br>[Junction 1 - Stream B-A] |
| Junction 1 - Stream B-A  | 11.6        | 131.87    | 0.98 | F   |                                    |
| Junction 1 - Stream C-AB | 1.3         | 15.37     | 0.51 | C   |                                    |
| Junction 2 - Stream B-AC | 9.1         | 138.64    | 0.96 | F   |                                    |
| Junction 2 - Stream C-AB | 2.6         | 15.60     | 0.61 | C   |                                    |

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

## File summary

### File Description

|             |                                    |
|-------------|------------------------------------|
| Title       | Bromley Farm Quarry                |
| Location    | New Mill Junction A616 A635        |
| Site number | 2074                               |
| Date        | 12/17/2024                         |
| Version     |                                    |
| Status      |                                    |
| Identifier  |                                    |
| Client      | SE                                 |
| Jobnumber   | 2074C                              |
| Enumerator  | LO                                 |
| Description | 2024 With Quarry Traffic Custom AM |

## Units

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

### Analysis Options

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

### Analysis Set Details

| ID | Include in report | Network flow scaling factor (%) | Network capacity scaling factor (%) |
|----|-------------------|---------------------------------|-------------------------------------|
| AL | ✓                 | 100.000                         | 100.000                             |

# 2024, AM + DEV

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 45.86              | E            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 24.95              | C            |

### Junction Network

| Driving side | Lighting       | Network residual capacity (%) | First arm reaching threshold | Network delay (s) | Network LOS |
|--------------|----------------|-------------------------------|------------------------------|-------------------|-------------|
| Left         | Normal/unknown | -19                           | Junction 1 - Stream B-A      | 34.83             | D           |

## Arms

### Arms

| Junction | Arm | Name                   | Description | Arm type |
|----------|-----|------------------------|-------------|----------|
| 1        | A   | A635 Holmfirth Road    |             | Major    |
|          | B   | A616 Penistone Road    |             | Minor    |
|          | C   | A616 Sheffield Road    |             | Major    |
| 2        | A   | A635 Penistone Road    |             | Major    |
|          | B   | A616 Huddersfield Road |             | Minor    |
|          | C   | A635 Penistone Road    |             | Major    |

### Major Arm Geometry

| Junction | Arm | Width of carriageway (m) | Has kerbed central reserve | Has right-turn storage | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|----------|-----|--------------------------|----------------------------|------------------------|-------------------------------|---------|----------------------|
| 1        | C   | 8.95                     |                            |                        | 30.0                          | ✓       | 0.00                 |
| 2        | C   | 6.60                     |                            |                        | 43.0                          | ✓       | 0.00                 |

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

### Minor Arm Geometry

| Junction | Arm | Minor arm type      | Lane width (m) | 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) |
|----------|-----|---------------------|----------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| 1        | B   | One lane plus flare |                | 10.00                 | 5.20            | 3.80             | 3.80             | 3.30             | ✓                     | 1.00               | 32                     | 80                      |
| 2        | B   | One lane            | 4.52           |                       |                 |                  |                  |                  |                       |                    | 20                     | 35                      |

### Slope / Intercept / Capacity

#### Custom Intercept Adjustments

| Junction | Custom stream intercept adjustment | Stream | Use adjustment | Reason       | Direct intercept adjustment (PCU/hr) |
|----------|------------------------------------|--------|----------------|--------------|--------------------------------------|
| 1        | 1                                  | B-A    | ✓              | Queue Length | -62                                  |
| 2        | 1                                  | B-A    | ✓              | Queue Length | -160                                 |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 1        | B-A    | 519                | 0.092         | 0.233         | 0.147         | 0.333         |
|          | B-C    | 674                | 0.090         | 0.228         | -             | -             |
|          | C-B    | 591                | 0.200         | 0.200         | -             | -             |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 2        | B-A    | 418                | 0.102         | 0.259         | 0.163         | 0.370         |
|          | B-C    | 744                | 0.111         | 0.281         | -             | -             |
|          | C-B    | 599                | 0.226         | 0.226         | -             | -             |

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

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

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D1 | 2024          | AM + DEV         | ONE HOUR             | 00:00              | 01:30               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 634                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 373                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 294                     | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 744                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 224                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 485                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      | To |     |     |    |
|------|----|-----|-----|----|
|      |    | A   | B   | C  |
| From | A  | 0   | 546 | 88 |
|      | B  | 301 | 0   | 72 |
|      | C  | 96  | 198 | 0  |
|      |    |     |     |    |

### Demand (PCU/hr)

#### Junction 2

|      | To |     |     |     |
|------|----|-----|-----|-----|
|      |    | A   | B   | C   |
| From | A  | 0   | 287 | 457 |
|      | B  | 75  | 0   | 149 |
|      | C  | 298 | 187 | 0   |
|      |    |     |     |     |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|  | To |    |    |    |
|--|----|----|----|----|
|  |    | A  | B  | C  |
|  | A  | 10 | 10 | 10 |
|  | B  | 10 | 10 | 10 |
|  | C  | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|  | To |    |    |    |
|--|----|----|----|----|
|  |    | A  | B  | C  |
|  | A  | 10 | 10 | 10 |
|  | B  | 10 | 10 | 10 |
|  | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-C    | 0.99    | 226.36        | 4.9             | F       | 66                      | 99                            |
|          | B-A    | 0.98    | 131.87        | 11.6            | F       | 276                     | 414                           |
|          | C-AB   | 0.51    | 15.37         | 1.3             | C       | 219                     | 329                           |
|          | C-A    |         |               |                 |         | 51                      | 76                            |
|          | A-B    |         |               |                 |         | 501                     | 752                           |
|          | A-C    |         |               |                 |         | 81                      | 121                           |
| 2        | B-AC   | 0.96    | 138.64        | 9.1             | F       | 206                     | 308                           |
|          | C-AB   | 0.61    | 15.60         | 2.6             | C       | 306                     | 458                           |
|          | C-A    |         |               |                 |         | 139                     | 209                           |
|          | A-B    |         |               |                 |         | 263                     | 395                           |
|          | A-C    |         |               |                 |         | 419                     | 629                           |

### Main Results for each time segment

00:00 - 00:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 54                    | 14                      | 446               | 0.121 | 54                  | 0.0               | 0.2             | 10.072    | B                             |
|          | B-A    | 227                   | 57                      | 403               | 0.562 | 221                 | 0.0               | 1.3             | 21.233    | C                             |
|          | C-AB   | 172                   | 43                      | 548               | 0.313 | 170                 | 0.0               | 0.5             | 10.405    | B                             |
|          | C-A    | 50                    | 12                      |                   |       | 50                  |                   |                 |           |                               |
|          | A-B    | 411                   | 103                     |                   |       | 411                 |                   |                 |           |                               |
|          | A-C    | 66                    | 17                      |                   |       | 66                  |                   |                 |           |                               |
| 2        | B-AC   | 169                   | 42                      | 384               | 0.439 | 165                 | 0.0               | 0.8             | 17.860    | C                             |
|          | C-AB   | 217                   | 54                      | 638               | 0.341 | 214                 | 0.0               | 0.8             | 9.317     | A                             |
|          | C-A    | 148                   | 37                      |                   |       | 148                 |                   |                 |           |                               |
|          | A-B    | 216                   | 54                      |                   |       | 216                 |                   |                 |           |                               |
|          | A-C    | 344                   | 86                      |                   |       | 344                 |                   |                 |           |                               |

## 00:15 - 00:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 65                    | 16                      | 326               | 0.198 | 64                  | 0.2               | 0.3             | 15.079    | C                             |
|          | B-A    | 271                   | 68                      | 378               | 0.716 | 266                 | 1.3               | 2.5             | 34.073    | D                             |
|          | C-AB   | 212                   | 53                      | 541               | 0.392 | 211                 | 0.5               | 0.8             | 11.992    | B                             |
|          | C-A    | 52                    | 13                      |                   |       | 52                  |                   |                 |           |                               |
|          | A-B    | 491                   | 123                     |                   |       | 491                 |                   |                 |           |                               |
|          | A-C    | 79                    | 20                      |                   |       | 79                  |                   |                 |           |                               |
| 2        | B-AC   | 201                   | 50                      | 335               | 0.602 | 199                 | 0.8               | 1.5             | 28.512    | D                             |
|          | C-AB   | 288                   | 72                      | 650               | 0.443 | 286                 | 0.8               | 1.2             | 10.914    | B                             |
|          | C-A    | 148                   | 37                      |                   |       | 148                 |                   |                 |           |                               |
|          | A-B    | 258                   | 65                      |                   |       | 258                 |                   |                 |           |                               |
|          | A-C    | 411                   | 103                     |                   |       | 411                 |                   |                 |           |                               |

## 00:30 - 00:45

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 79                    | 20                      | 80                | 0.988 | 64                  | 0.3               | 4.1             | 177.517   | F                             |
|          | B-A    | 331                   | 83                      | 341               | 0.973 | 308                 | 2.5               | 8.4             | 86.168    | F                             |
|          | C-AB   | 273                   | 68                      | 531               | 0.513 | 271                 | 0.8               | 1.3             | 15.145    | C                             |
|          | C-A    | 51                    | 13                      |                   |       | 51                  |                   |                 |           |                               |
|          | A-B    | 601                   | 150                     |                   |       | 601                 |                   |                 |           |                               |
|          | A-C    | 97                    | 24                      |                   |       | 97                  |                   |                 |           |                               |
| 2        | B-AC   | 247                   | 62                      | 258               | 0.955 | 226                 | 1.5               | 6.7             | 91.957    | F                             |
|          | C-AB   | 409                   | 102                     | 668               | 0.612 | 404                 | 1.2               | 2.5             | 15.043    | C                             |
|          | C-A    | 125                   | 31                      |                   |       | 125                 |                   |                 |           |                               |
|          | A-B    | 316                   | 79                      |                   |       | 316                 |                   |                 |           |                               |
|          | A-C    | 503                   | 126                     |                   |       | 503                 |                   |                 |           |                               |

## 00:45 - 01:00

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 79                    | 20                      | 88                | 0.897 | 76                  | 4.1               | 4.9             | 226.364   | F                             |
|          | B-A    | 331                   | 83                      | 337               | 0.983 | 318                 | 8.4               | 11.6            | 131.869   | F                             |
|          | C-AB   | 273                   | 68                      | 532               | 0.514 | 273                 | 1.3               | 1.3             | 15.366    | C                             |
|          | C-A    | 50                    | 13                      |                   |       | 50                  |                   |                 |           |                               |
|          | A-B    | 601                   | 150                     |                   |       | 601                 |                   |                 |           |                               |
|          | A-C    | 97                    | 24                      |                   |       | 97                  |                   |                 |           |                               |
| 2        | B-AC   | 247                   | 62                      | 256               | 0.962 | 237                 | 6.7               | 9.1             | 138.644   | F                             |
|          | C-AB   | 411                   | 103                     | 670               | 0.613 | 411                 | 2.5               | 2.6             | 15.597    | C                             |
|          | C-A    | 123                   | 31                      |                   |       | 123                 |                   |                 |           |                               |
|          | A-B    | 316                   | 79                      |                   |       | 316                 |                   |                 |           |                               |
|          | A-C    | 503                   | 126                     |                   |       | 503                 |                   |                 |           |                               |

## 01:00 - 01:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 65                    | 16                      | 230               | 0.281 | 82                  | 4.9               | 0.4             | 29.807    | D                             |
|          | B-A    | 271                   | 68                      | 371               | 0.729 | 303                 | 11.6              | 3.5             | 70.094    | F                             |
|          | C-AB   | 213                   | 53                      | 542               | 0.392 | 215                 | 1.3               | 0.8             | 12.204    | B                             |
|          | C-A    | 52                    | 13                      |                   |       | 52                  |                   |                 |           |                               |
|          | A-B    | 491                   | 123                     |                   |       | 491                 |                   |                 |           |                               |
|          | A-C    | 79                    | 20                      |                   |       | 79                  |                   |                 |           |                               |
| 2        | B-AC   | 201                   | 50                      | 332               | 0.606 | 230                 | 9.1               | 1.9             | 46.918    | E                             |
|          | C-AB   | 290                   | 73                      | 653               | 0.445 | 295                 | 2.6               | 1.3             | 11.322    | B                             |
|          | C-A    | 146                   | 36                      |                   |       | 146                 |                   |                 |           |                               |
|          | A-B    | 258                   | 65                      |                   |       | 258                 |                   |                 |           |                               |
|          | A-C    | 411                   | 103                     |                   |       | 411                 |                   |                 |           |                               |

## 01:15 - 01:30

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 54                    | 14                      | 424               | 0.128 | 55                  | 0.4               | 0.2             | 10.783    | B                             |
|          | B-A    | 227                   | 57                      | 402               | 0.564 | 235                 | 3.5               | 1.5             | 24.671    | C                             |
|          | C-AB   | 172                   | 43                      | 549               | 0.314 | 173                 | 0.8               | 0.6             | 10.584    | B                             |
|          | C-A    | 49                    | 12                      |                   |       | 49                  |                   |                 |           |                               |
|          | A-B    | 411                   | 103                     |                   |       | 411                 |                   |                 |           |                               |
|          | A-C    | 66                    | 17                      |                   |       | 66                  |                   |                 |           |                               |
| 2        | B-AC   | 169                   | 42                      | 382               | 0.441 | 172                 | 1.9               | 0.9             | 19.183    | C                             |
|          | C-AB   | 219                   | 55                      | 639               | 0.342 | 221                 | 1.3               | 0.8             | 9.546     | A                             |
|          | C-A    | 146                   | 37                      |                   |       | 146                 |                   |                 |           |                               |
|          | A-B    | 216                   | 54                      |                   |       | 216                 |                   |                 |           |                               |
|          | A-C    | 344                   | 86                      |                   |       | 344                 |                   |                 |           |                               |

| Junctions 10                                                                                                                                                     |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| PICADY 10 - Priority Intersection Module                                                                                                                         |  |  |  |  |  |  |  |
| Version: 10.1.1.1905                                                                                                                                             |  |  |  |  |  |  |  |
| © Copyright TRL Software Limited, 2023                                                                                                                           |  |  |  |  |  |  |  |
| For sales and distribution information, program advice and maintenance, contact TRL Software:                                                                    |  |  |  |  |  |  |  |
| +44 (0)1344 379777 software@trl.co.uk trlsoftware.com                                                                                                            |  |  |  |  |  |  |  |
| The users of this computer program for the solution of an engineering problem are in no way relieved of their responsibility for the correctness of the solution |  |  |  |  |  |  |  |

Filename: 2024 With Quarry Traffic PM Custom.j10

Path: Z:\Documents\PARAGON HIGHWAYS\Bromley Farm Quarry\PICADY\PICADY New Mill\PICADY Custom

Report generation date: 1/7/2025 4:45:46 PM

## «2024, PM + DEV

- »Junction Network
- »Arms
- »Traffic Demand
- »Origin-Destination Data
- »Vehicle Mix
- »Results

## Summary of junction performance

|                          | PM + DEV    |           |      |     |                                    |
|--------------------------|-------------|-----------|------|-----|------------------------------------|
|                          | Queue (PCU) | Delay (s) | RFC  | LOS | Network Residual Capacity          |
| 2024                     |             |           |      |     |                                    |
| Junction 1 - Stream B-C  | 5.2         | 221.64    | 0.99 | F   | -17 %<br>[Junction 1 - Stream B-A] |
| Junction 1 - Stream B-A  | 13.8        | 123.53    | 0.99 | F   |                                    |
| Junction 1 - Stream C-AB | 0.9         | 12.43     | 0.43 | B   |                                    |
| Junction 2 - Stream B-AC | 8.2         | 121.55    | 0.94 | F   |                                    |
| Junction 2 - Stream C-AB | 2.1         | 11.72     | 0.55 | B   |                                    |

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

## File summary

### File Description

|             |                                    |
|-------------|------------------------------------|
| Title       | Bromley Farm Quarry                |
| Location    | New Mill Junction A616 A635        |
| Site number | 2074                               |
| Date        | 12/17/2024                         |
| Version     |                                    |
| Status      |                                    |
| Identifier  |                                    |
| Client      | SE                                 |
| Jobnumber   | 2074C                              |
| Enumerator  | LO                                 |
| Description | 2024 With Quarry Traffic AM Custom |

## Units

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

### Analysis Options

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

### Analysis Set Details

| ID | Include in report | Network flow scaling factor (%) | Network capacity scaling factor (%) |
|----|-------------------|---------------------------------|-------------------------------------|
| AL | ✓                 | 100.000                         | 100.000                             |

# 2024, PM + DEV

## Data Errors and Warnings

No errors or warnings

## Junction Network

### Junctions

| Junction | Name     | Junction type | Arm A Direction | Arm B Direction | Arm C Direction | Use circulating lanes | Junction Delay (s) | Junction LOS |
|----------|----------|---------------|-----------------|-----------------|-----------------|-----------------------|--------------------|--------------|
| 1        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 52.87              | F            |
| 2        | untitled | T-Junction    | Two-way         | Two-way         | Two-way         |                       | 24.05              | C            |

### Junction Network

| Driving side | Lighting       | Network residual capacity (%) | First arm reaching threshold | Network delay (s) | Network LOS |
|--------------|----------------|-------------------------------|------------------------------|-------------------|-------------|
| Left         | Normal/unknown | -17                           | Junction 1 - Stream B-A      | 37.95             | E           |

## Arms

### Arms

| Junction | Arm | Name                   | Description | Arm type |
|----------|-----|------------------------|-------------|----------|
| 1        | A   | A635 Holmfirth Road    |             | Major    |
|          | B   | A616 Penistone Road    |             | Minor    |
|          | C   | A616 Sheffield Road    |             | Major    |
| 2        | A   | A635 Penistone Road    |             | Major    |
|          | B   | A616 Huddersfield Road |             | Minor    |
|          | C   | A635 Penistone Road    |             | Major    |

### Major Arm Geometry

| Junction | Arm | Width of carriageway (m) | Has kerbed central reserve | Has right-turn storage | Visibility for right turn (m) | Blocks? | Blocking queue (PCU) |
|----------|-----|--------------------------|----------------------------|------------------------|-------------------------------|---------|----------------------|
| 1        | C   | 8.95                     |                            |                        | 30.0                          | ✓       | 0.00                 |
| 2        | C   | 6.60                     |                            |                        | 43.0                          | ✓       | 0.00                 |

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

### Minor Arm Geometry

| Junction | Arm | Minor arm type      | Lane width (m) | 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) |
|----------|-----|---------------------|----------------|-----------------------|-----------------|------------------|------------------|------------------|-----------------------|--------------------|------------------------|-------------------------|
| 1        | B   | One lane plus flare |                | 10.00                 | 5.20            | 3.80             | 3.80             | 3.30             | ✓                     | 1.00               | 32                     | 80                      |
| 2        | B   | One lane            | 4.52           |                       |                 |                  |                  |                  |                       |                    | 20                     | 35                      |

### Slope / Intercept / Capacity

#### Custom Intercept Adjustments

| Junction | Custom stream intercept adjustment | Stream | Use adjustment | Reason       | Direct intercept adjustment (PCU/hr) |
|----------|------------------------------------|--------|----------------|--------------|--------------------------------------|
| 1        | 1                                  | B-A    | ✓              | Queue Length | 10                                   |
| 2        | 1                                  | B-A    | ✓              | Queue Length | -168                                 |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 1        | B-A    | 592                | 0.092         | 0.234         | 0.147         | 0.334         |
|          | B-C    | 671                | 0.090         | 0.227         | -             | -             |
|          | C-B    | 591                | 0.200         | 0.200         | -             | -             |

### Priority Intersection Slopes and Intercepts

| Junction | Stream | Intercept (PCU/hr) | Slope for A-B | Slope for A-C | Slope for C-A | Slope for C-B |
|----------|--------|--------------------|---------------|---------------|---------------|---------------|
| 2        | B-A    | 410                | 0.102         | 0.259         | 0.163         | 0.370         |
|          | B-C    | 744                | 0.111         | 0.281         | -             | -             |
|          | C-B    | 599                | 0.226         | 0.226         | -             | -             |

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

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

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

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D2 | 2024          | PM + DEV         | ONE HOUR             | 17:00              | 18:30               | 15                        | ✓                 |

### Demand overview (Traffic)

| Junction | Arm | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------|-----|------------|--------------|--------------|-------------------------|--------------------|
| 1        | A   |            | ONE HOUR     | ✓            | 528                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 455                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 276                     | 100.000            |
| 2        | A   |            | ONE HOUR     | ✓            | 574                     | 100.000            |
|          | B   |            | ONE HOUR     | ✓            | 235                     | 100.000            |
|          | C   |            | ONE HOUR     | ✓            | 543                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

#### Junction 1

|      | To |     |     |     |
|------|----|-----|-----|-----|
|      |    | A   | B   | C   |
| From | A  | 0   | 401 | 127 |
|      | B  | 376 | 0   | 79  |
|      | C  | 103 | 173 | 0   |
|      |    |     |     |     |

### Demand (PCU/hr)

#### Junction 2

|      | To |     |     |     |
|------|----|-----|-----|-----|
|      |    | A   | B   | C   |
| From | A  | 0   | 209 | 365 |
|      | B  | 87  | 0   | 148 |
|      | C  | 368 | 175 | 0   |
|      |    |     |     |     |

## Vehicle Mix

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

### Heavy Vehicle %

#### Junction 1

|  | To |    |    |    |
|--|----|----|----|----|
|  |    | A  | B  | C  |
|  | A  | 10 | 10 | 10 |
|  | B  | 10 | 10 | 10 |
|  | C  | 10 | 10 | 10 |

### Heavy Vehicle %

#### Junction 2

|  | To |    |    |    |
|--|----|----|----|----|
|  |    | A  | B  | C  |
|  | A  | 10 | 10 | 10 |
|  | B  | 10 | 10 | 10 |
|  | C  | 10 | 10 | 10 |

## Results

### Results Summary for whole modelled period

| Junction | Stream | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------|--------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1        | B-C    | 0.99    | 221.64        | 5.2             | F       | 72                      | 109                           |
|          | B-A    | 0.99    | 123.53        | 13.8            | F       | 345                     | 518                           |
|          | C-AB   | 0.43    | 12.43         | 0.9             | B       | 192                     | 289                           |
|          | C-A    |         |               |                 |         | 61                      | 91                            |
|          | A-B    |         |               |                 |         | 368                     | 552                           |
|          | A-C    |         |               |                 |         | 117                     | 175                           |
| 2        | B-AC   | 0.94    | 121.55        | 8.2             | F       | 216                     | 323                           |
|          | C-AB   | 0.55    | 11.72         | 2.1             | B       | 309                     | 464                           |
|          | C-A    |         |               |                 |         | 189                     | 283                           |
|          | A-B    |         |               |                 |         | 192                     | 288                           |
|          | A-C    |         |               |                 |         | 335                     | 502                           |

### Main Results for each time segment

#### 17:00 - 17:15

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 59                    | 15                      | 433               | 0.137 | 59                  | 0.0               | 0.2             | 10.569    | B                             |
|          | B-A    | 283                   | 71                      | 483               | 0.586 | 277                 | 0.0               | 1.5             | 18.731    | C                             |
|          | C-AB   | 151                   | 38                      | 567               | 0.266 | 149                 | 0.0               | 0.4             | 9.436     | A                             |
|          | C-A    | 57                    | 14                      |                   |       | 57                  |                   |                 |           |                               |
|          | A-B    | 302                   | 75                      |                   |       | 302                 |                   |                 |           |                               |
|          | A-C    | 96                    | 24                      |                   |       | 96                  |                   |                 |           |                               |
| 2        | B-AC   | 177                   | 44                      | 386               | 0.458 | 173                 | 0.0               | 0.9             | 18.329    | C                             |
|          | C-AB   | 218                   | 54                      | 701               | 0.311 | 215                 | 0.0               | 0.7             | 8.129     | A                             |
|          | C-A    | 191                   | 48                      |                   |       | 191                 |                   |                 |           |                               |
|          | A-B    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |
|          | A-C    | 275                   | 69                      |                   |       | 275                 |                   |                 |           |                               |

**17:15 - 17:30**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 71                    | 18                      | 313               | 0.227 | 70                  | 0.2               | 0.3             | 16.248    | C                             |
|          | B-A    | 338                   | 85                      | 459               | 0.737 | 333                 | 1.5               | 2.8             | 30.284    | D                             |
|          | C-AB   | 186                   | 47                      | 564               | 0.331 | 186                 | 0.4               | 0.6             | 10.472    | B                             |
|          | C-A    | 62                    | 15                      |                   |       | 62                  |                   |                 |           |                               |
|          | A-B    | 360                   | 90                      |                   |       | 360                 |                   |                 |           |                               |
|          | A-C    | 114                   | 29                      |                   |       | 114                 |                   |                 |           |                               |
| 2        | B-AC   | 211                   | 53                      | 342               | 0.617 | 208                 | 0.9               | 1.6             | 28.901    | D                             |
|          | C-AB   | 291                   | 73                      | 725               | 0.401 | 290                 | 0.7               | 1.1             | 9.116     | A                             |
|          | C-A    | 197                   | 49                      |                   |       | 197                 |                   |                 |           |                               |
|          | A-B    | 188                   | 47                      |                   |       | 188                 |                   |                 |           |                               |
|          | A-C    | 328                   | 82                      |                   |       | 328                 |                   |                 |           |                               |

**17:30 - 17:45**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 87                    | 22                      | 87                | 0.994 | 71                  | 0.3               | 4.4             | 171.185   | F                             |
|          | B-A    | 414                   | 103                     | 421               | 0.982 | 386                 | 2.8               | 9.7             | 78.776    | F                             |
|          | C-AB   | 240                   | 60                      | 559               | 0.428 | 238                 | 0.6               | 0.9             | 12.331    | B                             |
|          | C-A    | 64                    | 16                      |                   |       | 64                  |                   |                 |           |                               |
|          | A-B    | 442                   | 110                     |                   |       | 442                 |                   |                 |           |                               |
|          | A-C    | 140                   | 35                      |                   |       | 140                 |                   |                 |           |                               |
| 2        | B-AC   | 259                   | 65                      | 276               | 0.937 | 240                 | 1.6               | 6.3             | 84.086    | F                             |
|          | C-AB   | 417                   | 104                     | 760               | 0.548 | 413                 | 1.1               | 2.0             | 11.468    | B                             |
|          | C-A    | 181                   | 45                      |                   |       | 181                 |                   |                 |           |                               |
|          | A-B    | 230                   | 58                      |                   |       | 230                 |                   |                 |           |                               |
|          | A-C    | 402                   | 100                     |                   |       | 402                 |                   |                 |           |                               |

**17:45 - 18:00**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 87                    | 22                      | 96                | 0.904 | 84                  | 4.4               | 5.2             | 221.639   | F                             |
|          | B-A    | 414                   | 103                     | 417               | 0.992 | 398                 | 9.7               | 13.8            | 123.532   | F                             |
|          | C-AB   | 240                   | 60                      | 559               | 0.429 | 240                 | 0.9               | 0.9             | 12.428    | B                             |
|          | C-A    | 64                    | 16                      |                   |       | 64                  |                   |                 |           |                               |
|          | A-B    | 442                   | 110                     |                   |       | 442                 |                   |                 |           |                               |
|          | A-C    | 140                   | 35                      |                   |       | 140                 |                   |                 |           |                               |
| 2        | B-AC   | 259                   | 65                      | 275               | 0.941 | 251                 | 6.3               | 8.2             | 121.545   | F                             |
|          | C-AB   | 419                   | 105                     | 762               | 0.549 | 418                 | 2.0               | 2.1             | 11.718    | B                             |
|          | C-A    | 179                   | 45                      |                   |       | 179                 |                   |                 |           |                               |
|          | A-B    | 230                   | 58                      |                   |       | 230                 |                   |                 |           |                               |
|          | A-C    | 402                   | 100                     |                   |       | 402                 |                   |                 |           |                               |

**18:00 - 18:15**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 71                    | 18                      | 217               | 0.327 | 90                  | 5.2               | 0.6             | 35.027    | E                             |
|          | B-A    | 338                   | 85                      | 450               | 0.751 | 377                 | 13.8              | 3.9             | 66.380    | F                             |
|          | C-AB   | 187                   | 47                      | 564               | 0.331 | 188                 | 0.9               | 0.6             | 10.580    | B                             |
|          | C-A    | 61                    | 15                      |                   |       | 61                  |                   |                 |           |                               |
|          | A-B    | 360                   | 90                      |                   |       | 360                 |                   |                 |           |                               |
|          | A-C    | 114                   | 29                      |                   |       | 114                 |                   |                 |           |                               |
| 2        | B-AC   | 211                   | 53                      | 341               | 0.620 | 236                 | 8.2               | 2.0             | 44.672    | E                             |
|          | C-AB   | 293                   | 73                      | 728               | 0.403 | 297                 | 2.1               | 1.2             | 9.337     | A                             |
|          | C-A    | 195                   | 49                      |                   |       | 195                 |                   |                 |           |                               |
|          | A-B    | 188                   | 47                      |                   |       | 188                 |                   |                 |           |                               |
|          | A-C    | 328                   | 82                      |                   |       | 328                 |                   |                 |           |                               |

**18:15 - 18:30**

| Junction | Stream | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------|--------|-----------------------|-------------------------|-------------------|-------|---------------------|-------------------|-----------------|-----------|-------------------------------|
| 1        | B-C    | 59                    | 15                      | 411               | 0.145 | 61                  | 0.6               | 0.2             | 11.347    | B                             |
|          | B-A    | 283                   | 71                      | 482               | 0.587 | 292                 | 3.9               | 1.6             | 21.740    | C                             |
|          | C-AB   | 151                   | 38                      | 568               | 0.266 | 152                 | 0.6               | 0.5             | 9.548     | A                             |
|          | C-A    | 57                    | 14                      |                   |       | 57                  |                   |                 |           |                               |
|          | A-B    | 302                   | 75                      |                   |       | 302                 |                   |                 |           |                               |
|          | A-C    | 96                    | 24                      |                   |       | 96                  |                   |                 |           |                               |
| 2        | B-AC   | 177                   | 44                      | 385               | 0.460 | 181                 | 2.0               | 1.0             | 19.785    | C                             |
|          | C-AB   | 220                   | 55                      | 703               | 0.312 | 221                 | 1.2               | 0.7             | 8.286     | A                             |
|          | C-A    | 189                   | 47                      |                   |       | 189                 |                   |                 |           |                               |
|          | A-B    | 157                   | 39                      |                   |       | 157                 |                   |                 |           |                               |
|          | A-C    | 275                   | 69                      |                   |       | 275                 |                   |                 |           |                               |