

Waterlooville Park

# **Hambledon Roundabout Appraisal**



Waterlooville Park

***Hambledon Roundabout  
Appraisal***

|                       |                 |
|-----------------------|-----------------|
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## Appendix A

TRL Junctions Report:

Existing Geometry

Baseline Traffic; Baseline + Outline Application; and, Baseline + Outline & Net Development

## Appendix B

TRL Junctions Report:

Existing Geometry – Entry Sim

Baseline Traffic; Baseline + Outline Application; and, Baseline + Outline & Net Development

## Appendix C

TRL Junctions Report:

Proposed Geometry

Baseline Traffic; Baseline + Outline Application; and, Baseline + Outline & Net Development

## Appendix D

TRL Junctions Report:

Proposed Geometry – Entry Sim

Baseline Traffic; Baseline + Outline Application; and, Baseline + Outline & Net Development



## Introduction

1. Outline consent was granted for the mixed redevelopment of the BAE site in Waterlooville. The transport implications of a detailed application (LPA reference APP/21/00399) for a discount foodstore, drive through coffee shop and restaurant is considered within a Transport Assessment prepared by DTA. This note considers the highway authority (HCC) response to the Transport Assessment dated 20<sup>th</sup> August 2021 in respect to the appraisal of the Hambleton Road – Elettra Avenue Roundabout.
2. The junction has been modelled based on the existing arrangement prior to the implementation of the improvements work agreed for the Elettra Avenue approach as part of the outline application. The junction has also been modelled with the Havant Borough Council plans to improve pedestrian and cycle routes which incorporates in full the works identified by DTA within the outline application.
3. The demand matrices have been updated with recent traffic survey data undertaken in September 2021. This has allowed further validation of the ARCADY modelling. The demand is represented in passenger car units. A pcu factor of 2.0 has been applied. Heavy vehicle percentages have been included with the model (for purposes of queue length comparison). The 2026 design year has forecast in accordance with TEMPRO (RTF 2018 Scenario 1 – Reference) for Havant 003 (Principal Road). The composition of the demand is otherwise the same as within the TA.
4. The geometric parameters within the ARCADY model have been reviewed against the current road markings and the pattern of usage. The ARCADY model, currently version 10, has been updated accordingly although the differences in the slope (f) and intercept ( $Q_{e_{max}}$ ) values are in most cases not significant.

## Base model validation

5. The manual classified turning count survey also recorded queue lengths by lane. The base traffic flows with DIRECT entry have been modelled (model report attached in **Appendix A**). These have been compared to the observed, reported as the average queue over the 15-minute period, and summarized in **Table 1** below.
6. On Elettra Avenue there is uneven queuing evident from the survey which suggests that balance of demand across the entry is not even. The entry lanes in the existing arrangement are poorly aligned with the circulatory carriageway and this appears to affect the balance of lane usage which is skewed towards the off-side notwithstanding an almost exact balance between the ahead and left movements and the right turn movement. In practice it is evident from the survey footage that drivers on the ahead movement (to Milton Road) use both lanes and weave/merge on the circulatory carriageway before the exit. This is addressed by the HBC/DTA works. These are tested in more detail in the modelling below.



Table 1 2021 ARCADY Queue Length Comparison

|                    |                | Observed   | Modelled   |                | Observed    | Modelled   |
|--------------------|----------------|------------|------------|----------------|-------------|------------|
| Milton Road        | 07:30-07:45    | 2.0        | 2.2        | 16:30-16:45    | 0.0         | 2.0        |
|                    | 07:45-08:00    | 1.0        | 3.4        | 16:45-17:00    | 1.3         | 0.9        |
|                    | 08:00-08:15    | 1.3        | 5.9        | 17:00-17:15    | 0.7         | 2.2        |
|                    | 08:15-08:30    | 2.3        | 7.0        | 17:15-17:30    | 0.0         | 2.2        |
|                    | 08:30-08:45    | 1.3        | 6.2        | 17:30-17:45    | 0.0         | 2.2        |
|                    | 08:45-09:00    | 2.0        | 6.5        | 17:45-18:00    | 0.0         | 1.2        |
|                    | 09:00-09:15    | 2.0        | 3.3        | 18:00-18:15    | 0.0         | 1.2        |
|                    | 09:15-09:30    | 4.0        | 1.9        | 18:15-18:30    | 2.0         | 3.8        |
|                    | <b>Average</b> | <b>1.8</b> | <b>4.6</b> | <b>Average</b> | <b>0.5</b>  | <b>1.8</b> |
| Hambledon Road (S) | 07:30-07:45    | 3.3        | 0.7        | 16:30-16:45    | 5.8         | 1.6        |
|                    | 07:45-08:00    | 0.0        | 1.1        | 16:45-17:00    | 5.3         | 2.0        |
|                    | 08:00-08:15    | 1.3        | 1.1        | 17:00-17:15    | 0.0         | 2.0        |
|                    | 08:15-08:30    | 0.0        | 0.9        | 17:15-17:30    | 1.3         | 1.8        |
|                    | 08:30-08:45    | 0.0        | 0.9        | 17:30-17:45    | 3.0         | 1.3        |
|                    | 08:45-09:00    | 1.3        | 1.5        | 17:45-18:00    | 0.0         | 1.3        |
|                    | 09:00-09:15    | 0.0        | 1.8        | 18:00-18:15    | 1.3         | 1.3        |
|                    | 09:15-09:30    | 1.3        | 1.2        | 18:15-18:30    | 0.0         | 1.3        |
|                    | <b>Average</b> | <b>0.9</b> | <b>1.2</b> | <b>Average</b> | <b>2.1</b>  | <b>1.6</b> |
| Elettra Avenue     | 07:30-07:45    | 0.7        | 0.3        | 16:30-16:45    | 16.0        | 1.1        |
|                    | 07:45-08:00    | 0.7        | 0.4        | 16:45-17:00    | 17.3        | 1.3        |
|                    | 08:00-08:15    | 1.0        | 0.4        | 17:00-17:15    | 15.7        | 2.9        |
|                    | 08:15-08:30    | 1.3        | 0.6        | 17:15-17:30    | 13.0        | 1.6        |
|                    | 08:30-08:45    | 0.3        | 0.5        | 17:30-17:45    | 13.3        | 1.3        |
|                    | 08:45-09:00    | 0.3        | 0.6        | 17:45-18:00    | 6.3         | 0.7        |
|                    | 09:00-09:15    | 3.7        | 0.9        | 18:00-18:15    | 4.7         | 0.7        |
|                    | 09:15-09:30    | 0.7        | 0.8        | 18:15-18:30    | 5.0         | 1.1        |
|                    | <b>Average</b> | <b>1.1</b> | <b>0.6</b> | <b>Average</b> | <b>11.4</b> | <b>1.5</b> |
| Hambledon Road (N) | 07:30-07:45    | 0.0        | 0.8        | 16:30-16:45    | 2.3         | 1.2        |
|                    | 07:45-08:00    | 2.0        | 0.9        | 16:45-17:00    | 3.7         | 0.9        |
|                    | 08:00-08:15    | 1.3        | 1.1        | 17:00-17:15    | 10.7        | 1.5        |
|                    | 08:15-08:30    | 2.3        | 1.3        | 17:15-17:30    | 4.0         | 1.1        |
|                    | 08:30-08:45    | 1.7        | 1.1        | 17:30-17:45    | 2.7         | 1.4        |
|                    | 08:45-09:00    | 4.0        | 1.3        | 17:45-18:00    | 1.3         | 0.6        |
|                    | 09:00-09:15    | 5.3        | 1.4        | 18:00-18:15    | 4.7         | 1.0        |
|                    | 09:15-09:30    | 8.0        | 1.1        | 18:15-18:30    | 1.3         | 0.9        |
|                    | <b>Average</b> | <b>3.1</b> | <b>1.1</b> | <b>Average</b> | <b>3.8</b>  | <b>1.1</b> |

7. There is little existing queueing on either of the Hambledon Road approaches. There are signalized crossings on both Hambledon Road approaches. Roundabouts tend to be resilient to adjacent crossings as upstream modulation of traffic will tend to provide additional opportunities at downstream entries hence there is a natural rebalancing. Here there is limited evident impact on the operation of the junction from adjacent crossings.
8. In both cases the crossings are called relatively infrequently and there is negligible direct interaction (blocking back), evident from the survey footage, with the roundabout however the modulation of the upstream arrival profile results in more platooning of traffic.
9. The larger proportional differences are on Hambledon Road (North) approach and the geometry has been reviewed in detail. This entry has a staggered give way line and nearside hatching to reduce the entry radius to 10m and lane delineation to force a higher conflict angle.



10. The behaviour of drivers, see **Figure 1**, does not reflect the markings as is evident from the survey footage and pavement wear patterns. Drivers in the nearside lane stop well behind the give-way line and positioned their vehicles to straddle the edge marking. In this regard the effective entry radius is estimated to be at least 15m. The entry radius has not been increased as it is evident that drivers in the offside lane encroach into the nearside lane to reduce the conflict angle on entry. The effective conflict angle is estimated to be  $36^\circ$ . The geometry within the model is based on the evident effective geometry and this is appropriate although there may be some minor impairment of expected performance.

Figure 1 Capture from survey footage

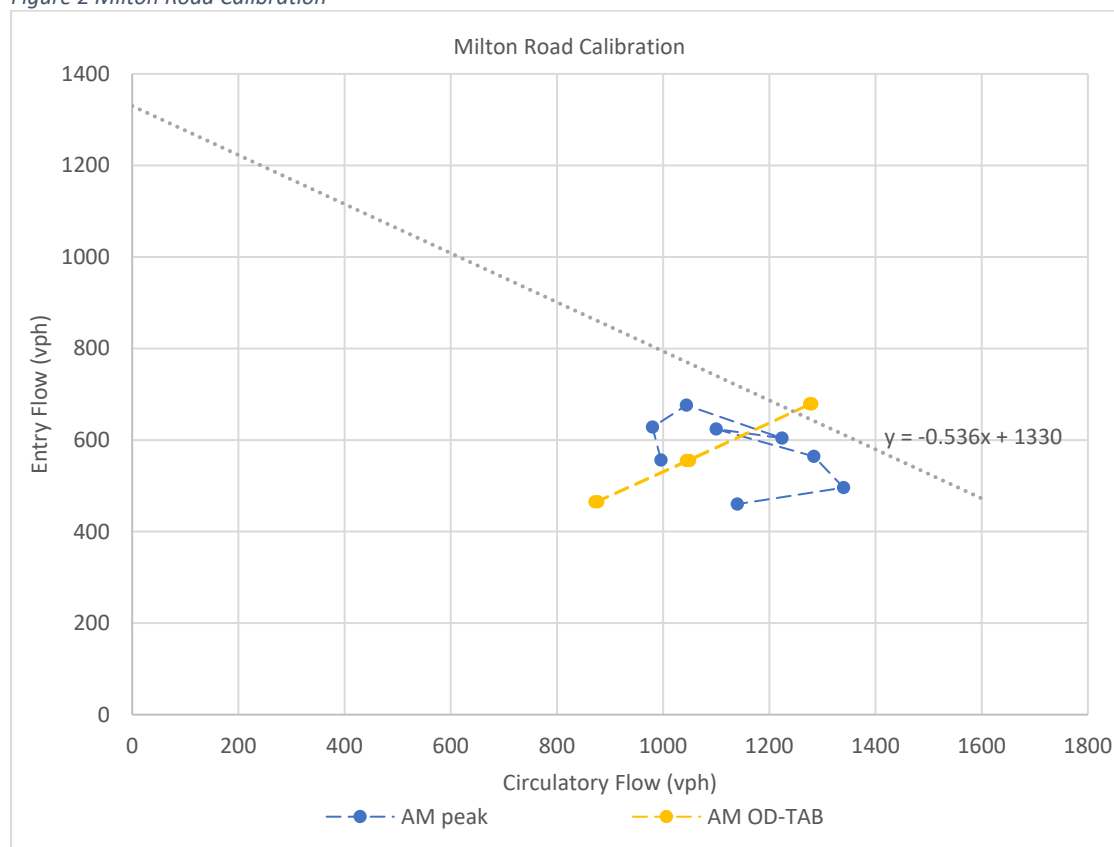


11. The capacity of Milton Road within the model is slightly understated resulting in longer modelled queues. As can be seen from the below plot, **Figure 2**, it is likely that the calculated slope is too steep at 0.536; a value of 0.33 – 0.4 is probably more representative. Also notable from this plot is that the actual pattern of circulatory vs entry demand (blue) is more complex than assumed by the OD-TAB (yellow); effectively the minor road peak is earlier than on the ahead movements. As a result, on DIRECT entry the peak demand is 90% capacity whereas under OD-TAB it is 105%. Within the TA, to adjust for this a FLAT profile was adopted, whereas in practice reality lies in between. Whilst OD-TAB has been



adopted within the below tests it should be noted that this is likely to similarly overstate demand in the future year and with development tests.

Figure 2 Milton Road Calibration



### Entry Simulation

12. To test the model, the junction has been re-modelled using entry simulation. Entry simulation is a tool within ARCADY which allows the sensitivity of the results to an explicit representation of the lane structure of a roundabout to be tested. It assumes that the overall capacity of each arm is the same as predicted by the core ARCADY model.
13. On Eletttra Avenue there some evidence for this within the queue survey results where there is a bias towards the off-side lane. The bias appears to stem from use of the off-side lane by drivers headed towards Milton Road. This is reproduced within the model by assigning Milton Road as a secondary destination for users of the nearside lane. This effectively caps the use of the nearside to 50% of the west-east drivers. It is represented this way around to best reflect the existing geometry/road markings. The results are summarized in **Table 2** below; the model report is attached in **Appendix B**.



Table 2 2021 ARCADY entry simulation queue length comparison

|                    |                | Observed   | Modelled   |                | Observed    | Modelled   |
|--------------------|----------------|------------|------------|----------------|-------------|------------|
| Milton Road        | 07:30-07:45    | 2.0        | 3.0        | 16:30-16:45    | 0.0         | 2.2        |
|                    | 07:45-08:00    | 1.0        | 3.6        | 16:45-17:00    | 1.3         | 0.9        |
|                    | 08:00-08:15    | 1.3        | 7.1        | 17:00-17:15    | 0.7         | 1.9        |
|                    | 08:15-08:30    | 2.3        | 9.8        | 17:15-17:30    | 0.0         | 2.3        |
|                    | 08:30-08:45    | 1.3        | 7.3        | 17:30-17:45    | 0.0         | 2.5        |
|                    | 08:45-09:00    | 2.0        | 8.3        | 17:45-18:00    | 0.0         | 1.2        |
|                    | 09:00-09:15    | 2.0        | 4.2        | 18:00-18:15    | 0.0         | 1.3        |
|                    | 09:15-09:30    | 4.0        | 1.9        | 18:15-18:30    | 2.0         | 4.3        |
|                    | <b>Average</b> | <b>2.0</b> | <b>5.7</b> | <b>Average</b> | <b>0.5</b>  | <b>2.1</b> |
| Hambledon Road (S) | 07:30-07:45    | 3.3        | 1.1        | 16:30-16:45    | 5.8         | 2.8        |
|                    | 07:45-08:00    | 0.0        | 1.6        | 16:45-17:00    | 5.3         | 3.4        |
|                    | 08:00-08:15    | 1.3        | 2.1        | 17:00-17:15    | 0.0         | 3.5        |
|                    | 08:15-08:30    | 0.0        | 1.7        | 17:15-17:30    | 1.3         | 3.0        |
|                    | 08:30-08:45    | 0.0        | 2.6        | 17:30-17:45    | 3.0         | 3.2        |
|                    | 08:45-09:00    | 1.3        | 3.2        | 17:45-18:00    | 0.0         | 2.1        |
|                    | 09:00-09:15    | 0.0        | 2.9        | 18:00-18:15    | 1.3         | 2.5        |
|                    | 09:15-09:30    | 1.3        | 1.9        | 18:15-18:30    | 0.0         | 2.1        |
|                    | <b>Average</b> | <b>0.9</b> | <b>2.1</b> | <b>Average</b> | <b>2.1</b>  | <b>2.8</b> |
| Elettra Avenue     | 07:30-07:45    | 0.7        | 0.6        | 16:30-16:45    | 16.0        | 3.0        |
|                    | 07:45-08:00    | 0.7        | 0.8        | 16:45-17:00    | 17.3        | 4.3        |
|                    | 08:00-08:15    | 1.0        | 0.9        | 17:00-17:15    | 15.7        | 23.5       |
|                    | 08:15-08:30    | 1.3        | 1.7        | 17:15-17:30    | 13.0        | 9.6        |
|                    | 08:30-08:45    | 0.3        | 1.0        | 17:30-17:45    | 13.3        | 5.4        |
|                    | 08:45-09:00    | 0.3        | 1.1        | 17:45-18:00    | 6.3         | 1.5        |
|                    | 09:00-09:15    | 3.7        | 1.8        | 18:00-18:15    | 4.7         | 1.8        |
|                    | 09:15-09:30    | 0.7        | 1.5        | 18:15-18:30    | 5.0         | 4.1        |
|                    | <b>Average</b> | <b>1.1</b> | <b>1.2</b> | <b>Average</b> | <b>11.4</b> | <b>6.7</b> |
| Hambledon Road (N) | 07:30-07:45    | 0.0        | 1.2        | 16:30-16:45    | 2.3         | 1.8        |
|                    | 07:45-08:00    | 2.0        | 1.3        | 16:45-17:00    | 3.7         | 1.4        |
|                    | 08:00-08:15    | 1.3        | 1.6        | 17:00-17:15    | 10.7        | 2.2        |
|                    | 08:15-08:30    | 2.3        | 1.8        | 17:15-17:30    | 4.0         | 1.6        |
|                    | 08:30-08:45    | 1.7        | 1.7        | 17:30-17:45    | 2.7         | 2.2        |
|                    | 08:45-09:00    | 4.0        | 2.3        | 17:45-18:00    | 1.3         | 1.1        |
|                    | 09:00-09:15    | 5.3        | 2.1        | 18:00-18:15    | 4.7         | 1.6        |
|                    | 09:15-09:30    | 8.0        | 1.9        | 18:15-18:30    | 1.3         | 1.6        |
|                    | <b>Average</b> | <b>3.1</b> | <b>1.7</b> | <b>Average</b> | <b>3.8</b>  | <b>1.6</b> |

14. The entry simulation approach as generally increased queue lengths across the board and the differential queuing apparent on Elettra Avenue is more closely replicated. On this basis no intercept corrections have been applied as the differences can be otherwise explained.
15. Baseline scenarios are summarized in **Table 3**; the model report is attached in **Appendix A**. The junction is generally operating within its practical capacity. The arm experiencing the greatest 'stress' in the AM peak is Milton Road however as set out above the OD-TAB profile is not representative on this approach and demand will be overstated as demonstrated by the DIRECT entry approach. As set out the Elettra Avenue results do not directly account for unequal lane usage.



Table 3 2021 Base (OD-TAB)

|                        | AM          |           |      | PM          |           |      | SAT         |           |      |
|------------------------|-------------|-----------|------|-------------|-----------|------|-------------|-----------|------|
|                        | Queue (PCU) | Delay (s) | RFC  | Queue (PCU) | Delay (s) | RFC  | Queue (PCU) | Delay (s) | RFC  |
| Milton Road            | 26.2        | 142.99    | 1.05 | 3.1         | 23.89     | 0.76 | 2.3         | 14.70     | 0.69 |
| Hambledon Road (south) | 2.1         | 4.93      | 0.66 | 2.6         | 5.63      | 0.72 | 1.4         | 3.76      | 0.58 |
| Elettra Avenue         | 0.8         | 5.44      | 0.44 | 2.7         | 12.39     | 0.73 | 0.6         | 4.57      | 0.39 |
| Hambledon Road (north) | 2.0         | 6.63      | 0.66 | 1.8         | 7.86      | 0.64 | 0.8         | 4.05      | 0.45 |

Table 4 2021 Base (DIRECT)

|                        | AM          |           |      | PM          |           |      | SAT         |           |     |
|------------------------|-------------|-----------|------|-------------|-----------|------|-------------|-----------|-----|
|                        | Queue (PCU) | Delay (s) | RFC  | Queue (PCU) | Delay (s) | RFC  | Queue (PCU) | Delay (s) | RFC |
| Milton Road            | 7.0         | 44.70     | 0.90 | 3.8         | 22.90     | 0.81 |             |           |     |
| Hambledon Road (south) | 1.9         | 4.62      | 0.65 | 2.0         | 4.73      | 0.66 |             |           |     |
| Elettra Avenue         | 0.9         | 5.57      | 0.46 | 2.9         | 11.90     | 0.74 |             |           |     |
| Hambledon Road (north) | 1.7         | 5.93      | 0.63 | 1.5         | 7.08      | 0.60 |             |           |     |

## Scenario Testing

16. The outline application scenarios are summarized in **Table 5** but without mitigation; the model report is attached in **Appendix A**. As would be expected the junction is operating at capacity but as acknowledged by HCC the applicant has funded works at the junction and therefore this test is not relevant.

Table 5 2026 Base + committed development excl mitigation (OD-TAB)

|                        | AM (DIRECT) |           |      | PM (OD-TAB) |           |      | SAT (OD-TAB) |           |      |
|------------------------|-------------|-----------|------|-------------|-----------|------|--------------|-----------|------|
|                        | Queue (PCU) | Delay (s) | RFC  | Queue (PCU) | Delay (s) | RFC  | Queue (PCU)  | Delay (s) | RFC  |
| Milton Road            | 48.9        | 279.73    | 1.08 | 14.1        | 94.42     | 0.99 | 9.9          | 57.32     | 0.93 |
| Hambledon Road (south) | 2.6         | 5.79      | 0.72 | 4.1         | 8.16      | 0.80 | 2.2          | 5.21      | 0.69 |
| Elettra Avenue         | 1.3         | 6.98      | 0.56 | 11.1        | 42.48     | 0.94 | 1.5          | 7.15      | 0.60 |
| Hambledon Road (north) | 2.3         | 7.40      | 0.70 | 2.9         | 12.17     | 0.74 | 1.2          | 5.37      | 0.54 |

17. A similar pattern is evident with the development scenarios summarized in **Table 6** but without mitigation; the model report is attached in **Appendix A**. Again, this test is not relevant.

Table 6 2026 Base + committed development + development excl mitigation (OD-TAB)

|                        | AM (DIRECT) |           |      | PM (OD-TAB) |           |      | SAT (OD-TAB) |           |      |
|------------------------|-------------|-----------|------|-------------|-----------|------|--------------|-----------|------|
|                        | Queue (PCU) | Delay (s) | RFC  | Queue (PCU) | Delay (s) | RFC  | Queue (PCU)  | Delay (s) | RFC  |
| Milton Road            | 115.4       | 716.09    | 1.20 | 18.0        | 121.73    | 1.02 | 9.3          | 57.37     | 0.93 |
| Hambledon Road (south) | 3.4         | 7.10      | 0.77 | 4.6         | 8.91      | 0.82 | 2.4          | 5.47      | 0.70 |
| Elettra Avenue         | 1.7         | 8.21      | 0.63 | 28.3        | 88.87     | 1.02 | 1.7          | 7.70      | 0.63 |
| Hambledon Road (north) | 2.7         | 8.55      | 0.73 | 3.2         | 13.45     | 0.76 | 1.2          | 5.49      | 0.54 |



18. The outline application scenarios are summarized in **Table 6**; the model report is attached in **Appendix C**. All arms in all scenarios are operating within their practical capacities.

Table 7 2026 Base + committed development with mitigation

|                        | AM (DIRECT) |           |      | PM (OD-TAB) |           |      | SAT (OD-TAB) |           |      |
|------------------------|-------------|-----------|------|-------------|-----------|------|--------------|-----------|------|
|                        | Queue (PCU) | Delay (s) | RFC  | Queue (PCU) | Delay (s) | RFC  | Queue (PCU)  | Delay (s) | RFC  |
| Milton Road            | 2.8         | 15.66     | 0.74 | 2.0         | 13.33     | 0.66 | 2.0          | 10.91     | 0.66 |
| Hambleton Road (south) | 2.5         | 5.60      | 0.72 | 4.1         | 8.25      | 0.80 | 2.2          | 5.22      | 0.69 |
| Elettra Avenue         | 0.8         | 3.95      | 0.45 | 2.4         | 8.76      | 0.71 | 0.9          | 4.11      | 0.46 |
| Hambleton Road (north) | 2.2         | 7.22      | 0.70 | 2.9         | 12.35     | 0.75 | 1.2          | 5.37      | 0.54 |

19. There is a slightly different issue on the Milton Road approach under entry simulation given the relatively short flare length. The default setting apportions the overall capacity evenly between the lanes i.e., the single lane has a  $Q_{e_{max}} = 1330$  vph but the two lanes share  $Q_{e_{max}} = 1700$  vph. The even apportionment is unrealistic but would need to be individually apportioned for each scenario within the constraint of an individual lane geometry to bring it back in line with the standard ARCADY performance. This would add significant complexity and so the standard apportionment is reported in **Table 8** (although Milton Road should be treated with caution!); the model report is attached in **Appendix D**.

Table 8 2026 Base + committed development with mitigation (OD-TAB) entry sim

|                        | AM          |           |     | PM          |           |     | SAT         |           |     |
|------------------------|-------------|-----------|-----|-------------|-----------|-----|-------------|-----------|-----|
|                        | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC |
| Milton Road            | 7.0         | 34.07     |     | 4.2         | 27.22     |     | 5.0         | 24.10     |     |
| Hambleton Road (south) | 4.1         | 8.13      |     | 7.2         | 12.56     |     | 3.3         | 7.83      |     |
| Elettra Avenue         | 1.6         | 7.73      |     | 5.4         | 18.97     |     | 1.9         | 8.27      |     |
| Hambleton Road (north) | 3.1         | 9.39      |     | 4.2         | 16.15     |     | 2.0         | 8.22      |     |

20. Significantly, however, the unequal lane use on Elettra Avenue should be addressed by the improved lane alignment. The off-side lane now aligns smoothly with the inside circulatory lane (as per CD116 para 3.18.2) and the nearside lane with the outside circulatory lane.
21. The with development scenarios are summarized in **Table 9 and 10**; the model reports are attached in **Appendix C**. All arms in all scenarios are operating within their practical capacities and the differences with the outline scenarios are modest.



Table 9 2026 Base + committed development + development with mitigation (OD-TAB)

|                        | AM (DIRECT) |           |      | PM (OD-TAB) |           |      | SAT (OD-TAB) |           |      |
|------------------------|-------------|-----------|------|-------------|-----------|------|--------------|-----------|------|
|                        | Queue (PCU) | Delay (s) | RFC  | Queue (PCU) | Delay (s) | RFC  | Queue (PCU)  | Delay (s) | RFC  |
| Milton Road            | 4.0         | 22.03     | 0.81 | 2.2         | 15.21     | 0.68 | 1.9          | 11.02     | 0.65 |
| Hambledon Road (south) | 3.4         | 7.11      | 0.78 | 4.7         | 9.08      | 0.83 | 2.4          | 5.49      | 0.71 |
| Elettra Avenue         | 0.9         | 4.39      | 0.49 | 3.3         | 11.00     | 0.77 | 1.0          | 4.28      | 0.49 |
| Hambledon Road (north) | 2.6         | 8.34      | 0.73 | 3.44        | 14.58     | 0.78 | 1.2          | 5.49      | 0.54 |

Table 10 2026 Base + committed development + development with mitigation (OD-TAB) entry sim

|                        | AM (DIRECT) |           |     | PM (OD-TAB) |           |     | SAT (OD-TAB) |           |     |
|------------------------|-------------|-----------|-----|-------------|-----------|-----|--------------|-----------|-----|
|                        | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC | Queue (PCU)  | Delay (s) | RFC |
| Milton Road            | 13.1        | 57.11     |     | 4.7         | 29.73     |     | 3.7          | 21.42     |     |
| Hambledon Road (south) | 4.7         | 10.37     |     | 6.4         | 11.55     |     | 3.6          | 8.01      |     |
| Elettra Avenue         | 1.7         | 8.96      |     | 7.9         | 23.78     |     | 2.2          | 8.78      |     |
| Hambledon Road (north) | 3.7         | 10.96     |     | 5.7         | 21.90     |     | 1.7          | 8.49      |     |

## Distribution Sensitivity

22. A sensitivity test has been undertaken with an additional 30 development vehicles per hour in and out of Elettra Avenue reassigned from Hambledon Road South to Hambledon Road North. This change is not sufficient to materially change the performance of either Hambledon Road nor the circulatory flow across Milton Road (the differences in delay are effectively a rounding issues related to the different HGV proportions assumed on different movements). The results are summarized in **Table 11 and 12** the model reports are attached in **Appendix C and D**. All arms in all scenarios are operating within their practical capacities.

Table 11 2026 Base + committed development + development with mitigation (OD-TAB)

|                        | AM          |           |      | PM          |           |      | SAT         |           |      |
|------------------------|-------------|-----------|------|-------------|-----------|------|-------------|-----------|------|
|                        | Queue (PCU) | Delay (s) | RFC  | Queue (PCU) | Delay (s) | RFC  | Queue (PCU) | Delay (s) | RFC  |
| Milton Road            | 5.1         | 29.08     | 0.85 | 2.2         | 15.21     | 0.62 | 1.9         | 11.02     | 0.65 |
| Hambledon Road (south) | 3.1         | 6.83      | 0.75 | 4.5         | 8.92      | 0.82 | 2.3         | 5.43      | 0.70 |
| Elettra Avenue         | 0.8         | 4.18      | 0.43 | 3.3         | 11.00     | 0.77 | 1.0         | 4.28      | 0.49 |
| Hambledon Road (north) | 2.9         | 8.95      | 0.74 | 3.7         | 15.22     | 0.79 | 1.2         | 5.58      | 0.55 |

Table 12 2026 Base + committed development + development with mitigation (OD-TAB) entry sim

|                        | AM          |           |     | PM          |           |     | SAT         |           |     |
|------------------------|-------------|-----------|-----|-------------|-----------|-----|-------------|-----------|-----|
|                        | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC | Queue (PCU) | Delay (s) | RFC |
| Milton Road            | 1.29        | 69.30     |     | 4.8         | 29.73     |     | 5.1         | 22.40     |     |
| Hambledon Road (south) | 5.0         | 9.73      |     | 6.4         | 11.55     |     | 3.7         | 7.90      |     |
| Elettra Avenue         | 1.6         | 8.52      |     | 7.9         | 23.78     |     | 1.9         | 8.89      |     |
| Hambledon Road (north) | 3.7         | 12.14     |     | 5.7         | 21.90     |     | 2.0         | 8.18      |     |



### **Conclusions**

23. The ARCADY modelling has been updated supported by additional data collection to inform the demand forecasting and model validation. Issues identified by HCC with respect to the geometry have been reviewed and required changes made where appropriate.
24. The advanced mode in ARCADY has been used to undertake lane simulation. This has demonstrated that the apparent discrepancy on Elettra Avenue can be explained by unequal lane usage for the existing layout.
25. HBC is proposing changes to the roundabout to improve capacity and better provide for pedestrians and cyclists. These incorporate changes, funded by the applicant, on Elettra Avenue which were agreed as part of the outline permission.
26. Testing of the HBC improvements show that pedestrians will be better accommodated, and the lane allocation and capacities will be well aligned to future patterns of demand.
27. Sensitivity testing has been undertaken on the distribution to test what the implications are of more traffic originating from the north. This shows that the future arrangement will be resilient on this regard. There is sufficient capacity on Hambledon Road and the changes on the circulatory carriageway are negligible.



## Appendix A

TRL Junctions Report:

Existing Geometry

Baseline Traffic; Baseline + Outline Application; and, Baseline + Outline & Net Development

| Junctions 10                                                                                                                                                     |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| ARCADY 10 - Roundabout Module                                                                                                                                    |  |  |  |  |  |  |  |  |  |
| Version: 10.0.2.1574                                                                                                                                             |  |  |  |  |  |  |  |  |  |
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| 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: Hambledon Road\_Milton Road\_Elettra Av (2021) RevA.j10

Path: P:\19000's\19235\Technical

Report generation date: 30/11/2021 16:25:08

- »(Default Analysis Set) - 2021 Base, AM
- »(Default Analysis Set) - 2021 Base, PM
- »(Default Analysis Set) - 2021 Base, SAT
- »(Default Analysis Set) - 2026 Base + Com Dev, PM
- »(Default Analysis Set) - 2026 Base + Com Dev, SAT
- »(Default Analysis Set) - 2026 Base + Com Dev + Dev, PM
- »(Default Analysis Set) - 2026 Base + Com Dev + Dev, SAT
- »(Default Analysis Set) - 2021 Base, AM-DIRECT
- »(Default Analysis Set) - 2021 Base, PM-DIRECT
- »(Default Analysis Set) - 2026 Base + Com Dev, AM-DIRECT
- »(Default Analysis Set) - 2026 Base + Com Dev + Dev, AM-DIRECT

### Summary of junction performance

|                            | AM                             |             |           |      |     | PM     |             |           |      |     | SAT    |             |           |      |     | AM-DIRECT |             |           |      |
|----------------------------|--------------------------------|-------------|-----------|------|-----|--------|-------------|-----------|------|-----|--------|-------------|-----------|------|-----|-----------|-------------|-----------|------|
|                            | Set ID                         | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID    | Queue (PCU) | Delay (s) | RFC  |
|                            | A1 - 2021 Base                 |             |           |      |     |        |             |           |      |     |        |             |           |      |     |           |             |           |      |
| 1 - Milton road            | D1                             | 26.2        | 142.99    | 1.05 | F   | D2     | 3.1         | 23.89     | 0.76 | C   | D3     | 2.3         | 14.70     | 0.69 | B   | D10       | 7.0         | 44.70     | 0.90 |
| 2 - Hambledon Road (south) |                                | 2.1         | 4.93      | 0.66 | A   |        | 2.6         | 5.63      | 0.72 | A   |        | 1.4         | 3.76      | 0.58 | A   |           | 1.9         | 4.62      | 0.65 |
| 3 - Elettra Avenue         |                                | 0.8         | 5.44      | 0.44 | A   |        | 2.7         | 12.39     | 0.73 | B   |        | 0.6         | 4.57      | 0.39 | A   |           | 0.9         | 5.57      | 0.46 |
| 4 - Hambledon Road (north) |                                | 2.0         | 6.63      | 0.66 | A   |        | 1.8         | 7.86      | 0.64 | A   |        | 0.8         | 4.05      | 0.45 | A   |           | 1.7         | 5.93      | 0.63 |
|                            | A1 - 2026 Base + Com Dev       |             |           |      |     |        |             |           |      |     |        |             |           |      |     |           |             |           |      |
| 1 - Milton road            |                                |             |           |      |     | D5     | 14.1        | 94.42     | 0.99 | F   | D6     | 9.9         | 57.32     | 0.93 | F   | D12       | 48.9        | 279.73    | 1.08 |
| 2 - Hambledon Road (south) |                                |             |           |      |     |        | 4.1         | 8.16      | 0.80 | A   |        | 2.2         | 5.21      | 0.69 | A   |           | 2.6         | 5.79      | 0.72 |
| 3 - Elettra Avenue         |                                |             |           |      |     |        | 11.1        | 42.48     | 0.94 | E   |        | 1.5         | 7.15      | 0.60 | A   |           | 1.3         | 6.98      | 0.56 |
| 4 - Hambledon Road (north) |                                |             |           |      |     |        | 2.9         | 12.17     | 0.74 | B   |        | 1.2         | 5.37      | 0.54 | A   |           | 2.3         | 7.40      | 0.70 |
|                            | A1 - 2026 Base + Com Dev + Dev |             |           |      |     |        |             |           |      |     |        |             |           |      |     |           |             |           |      |
| 1 - Milton road            |                                |             |           |      |     | D8     | 18.0        | 121.73    | 1.02 | F   | D9     | 9.3         | 57.37     | 0.93 | F   | D13       | 115.4       | 716.09    | 1.20 |
| 2 - Hambledon Road (south) |                                |             |           |      |     |        | 4.6         | 8.91      | 0.82 | A   |        | 2.4         | 5.47      | 0.70 | A   |           | 3.4         | 7.10      | 0.77 |
| 3 - Elettra Avenue         |                                |             |           |      |     |        | 28.3        | 88.87     | 1.02 | F   |        | 1.7         | 7.70      | 0.63 | A   |           | 1.7         | 8.21      | 0.63 |
| 4 - Hambledon Road (north) |                                |             |           |      |     |        | 3.2         | 13.45     | 0.76 | B   |        | 1.2         | 5.49      | 0.54 | A   |           | 2.7         | 8.55      | 0.73 |

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

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

## File summary

### File Description

|                    |                                             |
|--------------------|---------------------------------------------|
| <b>Title</b>       | Hambledon Road/ Milton Road/ Elettra Avenue |
| <b>Location</b>    | Waterlooville                               |
| <b>Site number</b> |                                             |
| <b>Date</b>        | 19/10/2021                                  |
| <b>Version</b>     |                                             |
| <b>Status</b>      | (new file)                                  |
| <b>Identifier</b>  |                                             |
| <b>Client</b>      |                                             |
| <b>Jobnumber</b>   | 19235                                       |
| <b>Enumerator</b>  | DTA\arcady                                  |
| <b>Description</b> |                                             |

## 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 iterations with HCM roundabouts | Max number of iterations for roundabouts |
|--------------------|-----------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------|---------------|-----------------------------|-----------------------|-------------------------------------|------------------------------------------|
| 5.75               |                             |                                   |                                   |                                   |                             | 0.85          | 36.00                       | 20.00                 |                                     | 500                                      |

## Demand Set Summary

| ID  | Scenario name             | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|---------------------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D1  | 2021 Base                 | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        | ✓                 |
| D2  | 2021 Base                 | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        | ✓                 |
| D3  | 2021 Base                 | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        | ✓                 |
| D4  | 2026 Base + Com Dev       | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        |                   |
| D5  | 2026 Base + Com Dev       | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        | ✓                 |
| D6  | 2026 Base + Com Dev       | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        | ✓                 |
| D7  | 2026 Base + Com Dev + Dev | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        |                   |
| D8  | 2026 Base + Com Dev + Dev | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        | ✓                 |
| D9  | 2026 Base + Com Dev + Dev | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        | ✓                 |
| D10 | 2021 Base                 | AM-DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |
| D11 | 2021 Base                 | PM-DIRECT        | DIRECT               | 16:30              | 18:30               | 120                      | 15                        | ✓                 |
| D12 | 2026 Base + Com Dev       | AM-DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |
| D13 | 2026 Base + Com Dev + Dev | AM-DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |

## Analysis Set Details

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

# (Default Analysis Set) - 2021 Base, AM

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 28.45              | D            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 28.45             | D           |

## Arms

### Arms

| Arm | Name                   | Description | No give-way line |
|-----|------------------------|-------------|------------------|
| 1   | Milton road            |             |                  |
| 2   | Hambledon Road (south) |             |                  |
| 3   | Elettra Avenue         |             |                  |
| 4   | Hambledon Road (north) |             |                  |

### Roundabout Geometry

| Arm                        | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Entry only | Exit only |
|----------------------------|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|------------|-----------|
| 1 - Milton road            | 3.40                             | 4.50                | 8.4                             | 20.0                 | 54.0                              | 15.2                               |            |           |
| 2 - Hambledon Road (south) | 7.30                             | 8.05                | 12.7                            | 47.5                 | 54.0                              | 18.0                               |            |           |
| 3 - Elettra Avenue         | 3.65                             | 7.70                | 52.6                            | 18.0                 | 54.0                              | 22.0                               |            |           |
| 4 - Hambledon Road (north) | 6.80                             | 7.90                | 5.0                             | 15.0                 | 54.0                              | 36.0                               |            |           |

### Slope / Intercept / Capacity

#### Arm Intercept Adjustments

| Arm                        | Type   | Reason | Direct intercept adjustment (PCU/hr) |
|----------------------------|--------|--------|--------------------------------------|
| 1 - Milton road            | Direct |        | 0                                    |
| 2 - Hambledon Road (south) | None   |        |                                      |
| 3 - Elettra Avenue         | None   |        |                                      |
| 4 - Hambledon Road (north) | None   |        |                                      |

#### Roundabout Slope and Intercept used in model

| Arm                        | Final slope | Final intercept (PCU/hr) |
|----------------------------|-------------|--------------------------|
| 1 - Milton road            | 0.536       | 1330                     |
| 2 - Hambledon Road (south) | 0.769       | 2571                     |
| 3 - Elettra Avenue         | 0.676       | 2137                     |
| 4 - Hambledon Road (north) | 0.666       | 2172                     |

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

### Arm Capacity Adjustments

| Arm             | Type   | Reason | Direct capacity adjustment (PCU/hr) |
|-----------------|--------|--------|-------------------------------------|
| 1 - Milton road | Direct |        | 0                                   |

## 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 | 2021 Base     | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 572                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1385                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 495                     | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 987                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 406                        | 78                 | 88                         |
|      | 2 - Hambledon Road (south) | 332             | 42                         | 325                | 686                        |
|      | 3 - Elettra Avenue         | 96              | 252                        | 0                  | 147                        |
|      | 4 - Hambledon Road (north) | 44              | 771                        | 112                | 60                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 10              | 0                          | 1                  | 6                          |
|      | 3 - Elettra Avenue         | 2               | 8                          | 0                  | 3                          |
|      | 4 - Hambledon Road (north) | 3               | 3                          | 3                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 1.05    | 142.99        | 26.2            | F       | 525                     | 787                           |
| 2 - Hambledon Road (south) | 0.66    | 4.93          | 2.1             | A       | 1271                    | 1906                          |
| 3 - Elettra Avenue         | 0.44    | 5.44          | 0.8             | A       | 454                     | 681                           |
| 4 - Hambledon Road (north) | 0.66    | 6.63          | 2.0             | A       | 906                     | 1359                          |

## Main Results for each time segment

### 08:00 - 08:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 431                   | 108                     | 928                       | 833               | 0.517 | 426                 | 354                             | 0.0               | 1.1             | 9.024     | A                             |
| 2 - Hambledon Road (south) | 1043                  | 261                     | 253                       | 2377              | 0.439 | 1039                | 1101                            | 0.0               | 0.8             | 2.829     | A                             |
| 3 - Elettra Avenue         | 373                   | 93                      | 906                       | 1525              | 0.244 | 371                 | 386                             | 0.0               | 0.3             | 3.288     | A                             |
| 4 - Hambledon Road (north) | 743                   | 186                     | 542                       | 1812              | 0.410 | 740                 | 736                             | 0.0               | 0.7             | 3.436     | A                             |

### 08:15 - 08:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 514                   | 129                     | 1110                      | 735               | 0.700 | 509                 | 424                             | 1.1               | 2.3             | 16.099    | C                             |
| 2 - Hambledon Road (south) | 1245                  | 311                     | 302                       | 2339              | 0.532 | 1244                | 1318                            | 0.8               | 1.2             | 3.459     | A                             |
| 3 - Elettra Avenue         | 445                   | 111                     | 1084                      | 1405              | 0.317 | 444                 | 462                             | 0.3               | 0.5             | 3.951     | A                             |
| 4 - Hambledon Road (north) | 887                   | 222                     | 648                       | 1741              | 0.510 | 886                 | 880                             | 0.7               | 1.1             | 4.309     | A                             |

### 08:30 - 08:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 630                   | 157                     | 1358                      | 602               | 1.046 | 573                 | 518                             | 2.3               | 16.4            | 76.427    | F                             |
| 2 - Hambledon Road (south) | 1525                  | 381                     | 355                       | 2298              | 0.664 | 1521                | 1576                            | 1.2               | 2.0             | 4.863     | A                             |
| 3 - Elettra Avenue         | 545                   | 136                     | 1318                      | 1246              | 0.437 | 544                 | 558                             | 0.5               | 0.8             | 5.395     | A                             |
| 4 - Hambledon Road (north) | 1087                  | 272                     | 793                       | 1644              | 0.661 | 1083                | 1069                            | 1.1               | 2.0             | 6.534     | A                             |

### 08:45 - 09:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 630                   | 157                     | 1362                      | 600               | 1.049 | 590                 | 520                             | 16.4              | 26.2            | 142.986   | F                             |
| 2 - Hambledon Road (south) | 1525                  | 381                     | 361                       | 2294              | 0.665 | 1525                | 1592                            | 2.0               | 2.1             | 4.931     | A                             |
| 3 - Elettra Avenue         | 545                   | 136                     | 1324                      | 1242              | 0.439 | 545                 | 562                             | 0.8               | 0.8             | 5.442     | A                             |
| 4 - Hambledon Road (north) | 1087                  | 272                     | 795                       | 1643              | 0.661 | 1087                | 1074                            | 2.0               | 2.0             | 6.629     | A                             |

### 09:00 - 09:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 514                   | 129                     | 1116                      | 732               | 0.703 | 609                 | 426                             | 26.2              | 2.7             | 47.922    | E                             |
| 2 - Hambledon Road (south) | 1245                  | 311                     | 332                       | 2316              | 0.538 | 1248                | 1393                            | 2.1               | 1.2             | 3.566     | A                             |
| 3 - Elettra Avenue         | 445                   | 111                     | 1103                      | 1392              | 0.320 | 446                 | 477                             | 0.8               | 0.5             | 4.022     | A                             |
| 4 - Hambledon Road (north) | 887                   | 222                     | 651                       | 1739              | 0.510 | 891                 | 899                             | 2.0               | 1.1             | 4.370     | A                             |

### 09:15 - 09:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 431                   | 108                     | 933                       | 830               | 0.519 | 437                 | 356                             | 2.7               | 1.1             | 9.565     | A                             |
| 2 - Hambledon Road (south) | 1043                  | 261                     | 256                       | 2374              | 0.439 | 1044                | 1113                            | 1.2               | 0.8             | 2.858     | A                             |
| 3 - Elettra Avenue         | 373                   | 93                      | 912                       | 1521              | 0.245 | 373                 | 389                             | 0.5               | 0.3             | 3.311     | A                             |
| 4 - Hambledon Road (north) | 743                   | 186                     | 544                       | 1810              | 0.411 | 745                 | 741                             | 1.1               | 0.7             | 3.467     | A                             |

# (Default Analysis Set) - 2021 Base, PM

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 9.85               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 9.85              | 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 | 2021 Base     | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 436                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1537                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 733                     | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 756                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 303                        | 88                 | 45                         |
|      | 2 - Hambledon Road (south) | 521             | 99                         | 228                | 689                        |
|      | 3 - Elettra Avenue         | 199             | 369                        | 0                  | 165                        |
|      | 4 - Hambledon Road (north) | 42              | 576                        | 96                 | 42                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 3               | 2                          | 0                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 1                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 2               | 3                          | 1                  | 0                          |

## Results

### Results Summary for whole modelled period

| Am                         | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.76    | 23.89         | 3.1             | C       | 400                     | 600                           |
| 2 - Hambledon Road (south) | 0.72    | 5.63          | 2.6             | A       | 1410                    | 2116                          |
| 3 - Elettra Avenue         | 0.73    | 12.39         | 2.7             | B       | 673                     | 1009                          |
| 4 - Hambledon Road (north) | 0.64    | 7.86          | 1.8             | A       | 694                     | 1041                          |

### Main Results for each time segment

#### 16:30 - 16:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 328                   | 82                      | 886                       | 855               | 0.384 | 326                 | 572                             | 0.0               | 0.6             | 6.962     | A                             |
| 2 - Hambledon Road (south) | 1157                  | 289                     | 203                       | 2415              | 0.479 | 1153                | 1009                            | 0.0               | 0.9             | 2.890     | A                             |
| 3 - Elettra Avenue         | 552                   | 138                     | 1047                      | 1429              | 0.386 | 549                 | 309                             | 0.0               | 0.6             | 4.109     | A                             |
| 4 - Hambledon Road (north) | 569                   | 142                     | 891                       | 1579              | 0.360 | 567                 | 706                             | 0.0               | 0.6             | 3.639     | A                             |

#### 16:45 - 17:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 392                   | 98                      | 1060                      | 762               | 0.515 | 390                 | 684                             | 0.6               | 1.1             | 9.907     | A                             |
| 2 - Hambledon Road (south) | 1382                  | 345                     | 243                       | 2384              | 0.579 | 1380                | 1208                            | 0.9               | 1.4             | 3.634     | A                             |
| 3 - Elettra Avenue         | 659                   | 165                     | 1253                      | 1290              | 0.511 | 657                 | 370                             | 0.6               | 1.0             | 5.714     | A                             |
| 4 - Hambledon Road (north) | 680                   | 170                     | 1066                      | 1463              | 0.465 | 678                 | 845                             | 0.6               | 0.9             | 4.698     | A                             |

#### 17:00 - 17:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 480                   | 120                     | 1295                      | 636               | 0.755 | 473                 | 835                             | 1.1               | 2.9             | 21.761    | C                             |
| 2 - Hambledon Road (south) | 1692                  | 423                     | 296                       | 2344              | 0.722 | 1687                | 1472                            | 1.4               | 2.6             | 5.529     | A                             |
| 3 - Elettra Avenue         | 807                   | 202                     | 1532                      | 1102              | 0.733 | 801                 | 451                             | 1.0               | 2.6             | 11.804    | B                             |
| 4 - Hambledon Road (north) | 832                   | 208                     | 1301                      | 1306              | 0.637 | 829                 | 1032                            | 0.9               | 1.8             | 7.679     | A                             |

#### 17:15 - 17:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 480                   | 120                     | 1301                      | 633               | 0.759 | 479                 | 839                             | 2.9               | 3.1             | 23.892    | C                             |
| 2 - Hambledon Road (south) | 1692                  | 423                     | 298                       | 2342              | 0.723 | 1692                | 1482                            | 2.6               | 2.6             | 5.626     | A                             |
| 3 - Elettra Avenue         | 807                   | 202                     | 1537                      | 1098              | 0.735 | 807                 | 453                             | 2.6               | 2.7             | 12.393    | B                             |
| 4 - Hambledon Road (north) | 832                   | 208                     | 1308                      | 1302              | 0.640 | 832                 | 1036                            | 1.8               | 1.8             | 7.858     | A                             |

**17:30 - 17:45**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 392                   | 98                      | 1070                      | 757               | 0.518 | 400                 | 689                             | 3.1               | 1.1             | 10.581    | B                             |
| 2 - Hambledon Road (south) | 1382                  | 345                     | 247                       | 2382              | 0.580 | 1387                | 1223                            | 2.6               | 1.4             | 3.694     | A                             |
| 3 - Elettra Avenue         | 659                   | 165                     | 1260                      | 1286              | 0.513 | 666                 | 373                             | 2.7               | 1.1             | 5.910     | A                             |
| 4 - Hambledon Road (north) | 680                   | 170                     | 1075                      | 1457              | 0.467 | 683                 | 851                             | 1.8               | 0.9             | 4.793     | A                             |

**17:45 - 18:00**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 328                   | 82                      | 892                       | 852               | 0.385 | 330                 | 575                             | 1.1               | 0.7             | 7.122     | A                             |
| 2 - Hambledon Road (south) | 1157                  | 289                     | 205                       | 2414              | 0.479 | 1159                | 1017                            | 1.4               | 0.9             | 2.918     | A                             |
| 3 - Elettra Avenue         | 552                   | 138                     | 1053                      | 1426              | 0.387 | 554                 | 311                             | 1.1               | 0.6             | 4.167     | A                             |
| 4 - Hambledon Road (north) | 569                   | 142                     | 896                       | 1575              | 0.361 | 570                 | 710                             | 0.9               | 0.6             | 3.679     | A                             |

# (Default Analysis Set) - 2021 Base, SAT

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 5.92               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 5.92              | A           |

## Traffic Demand

### Demand Set Details

| ID | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time segment length (min) | Run automatically |
|----|---------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D3 | 2021 Base     | SAT              | ONE HOUR             | 11:15              | 12:45               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 512                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1235                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 456                     | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 655                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 355                        | 93                 | 64                         |
|      | 2 - Hambledon Road (south) | 390             | 26                         | 198                | 621                        |
|      | 3 - Elettra Avenue         | 125             | 216                        | 0                  | 115                        |
|      | 4 - Hambledon Road (north) | 24              | 506                        | 89                 | 36                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 1                  | 0                          |
|      | 2 - Hambledon Road (south) | 3               | 0                          | 1                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 0                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 4               | 1                          | 0                  | 0                          |

## Results

### Results Summary for whole modelled period

| Am                         | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.69    | 14.70         | 2.3             | B       | 470                     | 705                           |
| 2 - Hambledon Road (south) | 0.58    | 3.76          | 1.4             | A       | 1133                    | 1700                          |
| 3 - Elettra Avenue         | 0.39    | 4.57          | 0.6             | A       | 418                     | 628                           |
| 4 - Hambledon Road (north) | 0.45    | 4.05          | 0.8             | A       | 601                     | 902                           |

### Main Results for each time segment

#### 11:15 - 11:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 385                   | 96                      | 655                       | 979               | 0.394 | 383                 | 405                             | 0.0               | 0.7             | 6.189     | A                             |
| 2 - Hambledon Road (south) | 930                   | 232                     | 211                       | 2409              | 0.386 | 927                 | 827                             | 0.0               | 0.6             | 2.464     | A                             |
| 3 - Elettra Avenue         | 343                   | 86                      | 853                       | 1560              | 0.220 | 342                 | 285                             | 0.0               | 0.3             | 2.960     | A                             |
| 4 - Hambledon Road (north) | 493                   | 123                     | 568                       | 1794              | 0.275 | 492                 | 627                             | 0.0               | 0.4             | 2.787     | A                             |

#### 11:30 - 11:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 460                   | 115                     | 784                       | 910               | 0.506 | 459                 | 484                             | 0.7               | 1.0             | 8.187     | A                             |
| 2 - Hambledon Road (south) | 1110                  | 278                     | 253                       | 2377              | 0.467 | 1109                | 990                             | 0.6               | 0.9             | 2.882     | A                             |
| 3 - Elettra Avenue         | 410                   | 102                     | 1021                      | 1447              | 0.283 | 409                 | 341                             | 0.3               | 0.4             | 3.476     | A                             |
| 4 - Hambledon Road (north) | 589                   | 147                     | 680                       | 1720              | 0.342 | 588                 | 751                             | 0.4               | 0.5             | 3.209     | A                             |

#### 11:45 - 12:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 564                   | 141                     | 960                       | 816               | 0.691 | 559                 | 592                             | 1.0               | 2.2             | 14.184    | B                             |
| 2 - Hambledon Road (south) | 1360                  | 340                     | 309                       | 2334              | 0.583 | 1358                | 1210                            | 0.9               | 1.4             | 3.739     | A                             |
| 3 - Elettra Avenue         | 502                   | 126                     | 1249                      | 1293              | 0.388 | 501                 | 417                             | 0.4               | 0.6             | 4.553     | A                             |
| 4 - Hambledon Road (north) | 721                   | 180                     | 832                       | 1618              | 0.446 | 720                 | 919                             | 0.5               | 0.8             | 4.039     | A                             |

#### 12:00 - 12:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 564                   | 141                     | 961                       | 815               | 0.692 | 563                 | 593                             | 2.2               | 2.3             | 14.701    | B                             |
| 2 - Hambledon Road (south) | 1360                  | 340                     | 310                       | 2333              | 0.583 | 1360                | 1214                            | 1.4               | 1.4             | 3.759     | A                             |
| 3 - Elettra Avenue         | 502                   | 126                     | 1252                      | 1291              | 0.389 | 502                 | 418                             | 0.6               | 0.6             | 4.573     | A                             |
| 4 - Hambledon Road (north) | 721                   | 180                     | 833                       | 1617              | 0.446 | 721                 | 920                             | 0.8               | 0.8             | 4.053     | A                             |

**12:15 - 12:30**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 460                   | 115                     | 786                       | 909               | 0.507 | 465                 | 486                             | 2.3               | 1.1             | 8.439     | A                             |
| 2 - Hambledon Road (south) | 1110                  | 278                     | 255                       | 2375              | 0.467 | 1112                | 996                             | 1.4               | 0.9             | 2.900     | A                             |
| 3 - Elettra Avenue         | 410                   | 102                     | 1025                      | 1445              | 0.284 | 411                 | 343                             | 0.6               | 0.4             | 3.495     | A                             |
| 4 - Hambledon Road (north) | 589                   | 147                     | 682                       | 1718              | 0.343 | 590                 | 753                             | 0.8               | 0.5             | 3.224     | A                             |

**12:30 - 12:45**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 385                   | 96                      | 658                       | 977               | 0.394 | 387                 | 406                             | 1.1               | 0.7             | 6.295     | A                             |
| 2 - Hambledon Road (south) | 930                   | 232                     | 213                       | 2407              | 0.386 | 931                 | 832                             | 0.9               | 0.6             | 2.478     | A                             |
| 3 - Elettra Avenue         | 343                   | 86                      | 857                       | 1558              | 0.220 | 344                 | 287                             | 0.4               | 0.3             | 2.975     | A                             |
| 4 - Hambledon Road (north) | 493                   | 123                     | 571                       | 1792              | 0.275 | 494                 | 630                             | 0.5               | 0.4             | 2.798     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev, PM

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 28.18              | D            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 28.18             | 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 |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2026 Base + Com Dev | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 498                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1661                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 913                     | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 799                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 313                        | 138                | 47                         |
|      | 2 - Hambledon Road (south) | 539             | 102                        | 308                | 712                        |
|      | 3 - Elettra Avenue         | 256             | 459                        | 0                  | 198                        |
|      | 4 - Hambledon Road (north) | 43              | 596                        | 125                | 35                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 3               | 2                          | 0                  | 6                          |
|      | 3 - Elettra Avenue         | 0               | 1                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 0               | 4                          | 0                  | 1                          |

## Results

### Results Summary for whole modelled period

| Am                         | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.99    | 94.42         | 14.1            | F       | 457                     | 685                           |
| 2 - Hambledon Road (south) | 0.80    | 8.16          | 4.1             | A       | 1524                    | 2286                          |
| 3 - Elettra Avenue         | 0.94    | 42.48         | 11.1            | E       | 838                     | 1257                          |
| 4 - Hambledon Road (north) | 0.74    | 12.17         | 2.9             | B       | 733                     | 1100                          |

### Main Results for each time segment

#### 16:30 - 16:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 375                   | 94                      | 987                       | 801               | 0.468 | 371                 | 628                             | 0.0               | 0.9             | 8.524     | A                             |
| 2 - Hambledon Road (south) | 1250                  | 313                     | 258                       | 2373              | 0.527 | 1246                | 1100                            | 0.0               | 1.1             | 3.296     | A                             |
| 3 - Elettra Avenue         | 687                   | 172                     | 1076                      | 1410              | 0.488 | 684                 | 428                             | 0.0               | 0.9             | 4.967     | A                             |
| 4 - Hambledon Road (north) | 602                   | 150                     | 1016                      | 1496              | 0.402 | 599                 | 744                             | 0.0               | 0.7             | 4.122     | A                             |

#### 16:45 - 17:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 448                   | 112                     | 1180                      | 697               | 0.642 | 444                 | 751                             | 0.9               | 1.8             | 14.386    | B                             |
| 2 - Hambledon Road (south) | 1493                  | 373                     | 308                       | 2334              | 0.640 | 1491                | 1316                            | 1.1               | 1.8             | 4.408     | A                             |
| 3 - Elettra Avenue         | 821                   | 205                     | 1287                      | 1267              | 0.648 | 817                 | 512                             | 0.9               | 1.8             | 8.002     | A                             |
| 4 - Hambledon Road (north) | 718                   | 180                     | 1215                      | 1363              | 0.527 | 717                 | 889                             | 0.7               | 1.1             | 5.718     | A                             |

#### 17:00 - 17:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 548                   | 137                     | 1429                      | 564               | 0.972 | 516                 | 911                             | 1.8               | 9.8             | 56.777    | F                             |
| 2 - Hambledon Road (south) | 1829                  | 457                     | 367                       | 2289              | 0.799 | 1820                | 1578                            | 1.8               | 3.9             | 7.814     | A                             |
| 3 - Elettra Avenue         | 1005                  | 251                     | 1570                      | 1076              | 0.934 | 976                 | 617                             | 1.8               | 9.1             | 30.097    | D                             |
| 4 - Hambledon Road (north) | 880                   | 220                     | 1467                      | 1196              | 0.736 | 873                 | 1079                            | 1.1               | 2.7             | 11.281    | B                             |

#### 17:15 - 17:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 548                   | 137                     | 1445                      | 555               | 0.987 | 531                 | 920                             | 9.8               | 14.1            | 94.425    | F                             |
| 2 - Hambledon Road (south) | 1829                  | 457                     | 373                       | 2284              | 0.801 | 1828                | 1603                            | 3.9               | 4.1             | 8.162     | A                             |
| 3 - Elettra Avenue         | 1005                  | 251                     | 1578                      | 1071              | 0.939 | 997                 | 624                             | 9.1               | 11.1            | 42.484    | E                             |
| 4 - Hambledon Road (north) | 880                   | 220                     | 1487                      | 1182              | 0.744 | 879                 | 1089                            | 2.7               | 2.9             | 12.174    | B                             |

**17:30 - 17:45**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 448                   | 112                     | 1209                      | 682               | 0.657 | 496                 | 767                             | 14.1              | 2.1             | 24.588    | C                             |
| 2 - Hambledon Road (south) | 1493                  | 373                     | 329                       | 2318              | 0.644 | 1502                | 1376                            | 4.1               | 1.9             | 4.619     | A                             |
| 3 - Elettra Avenue         | 821                   | 205                     | 1302                      | 1257              | 0.653 | 857                 | 529                             | 11.1              | 1.9             | 9.879     | A                             |
| 4 - Hambledon Road (north) | 718                   | 180                     | 1251                      | 1339              | 0.536 | 725                 | 908                             | 2.9               | 1.2             | 6.100     | A                             |

**17:45 - 18:00**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 375                   | 94                      | 996                       | 796               | 0.471 | 380                 | 633                             | 2.1               | 0.9             | 8.951     | A                             |
| 2 - Hambledon Road (south) | 1250                  | 313                     | 262                       | 2370              | 0.528 | 1253                | 1113                            | 1.9               | 1.2             | 3.351     | A                             |
| 3 - Elettra Avenue         | 687                   | 172                     | 1083                      | 1405              | 0.489 | 691                 | 432                             | 1.9               | 1.0             | 5.106     | A                             |
| 4 - Hambledon Road (north) | 602                   | 150                     | 1025                      | 1490              | 0.404 | 604                 | 749                             | 1.2               | 0.7             | 4.193     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev, SAT

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 14.87              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 14.87             | B           |

## 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 |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2026 Base + Com Dev | SAT              | ONE HOUR             | 11:15              | 12:45               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 602                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1390                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 687                     | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 719                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 368                        | 168                | 66                         |
|      | 2 - Hambledon Road (south) | 405             | 27                         | 314                | 644                        |
|      | 3 - Elettra Avenue         | 199             | 330                        | 0                  | 158                        |
|      | 4 - Hambledon Road (north) | 25              | 525                        | 132                | 37                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 1                  | 0                          |
|      | 2 - Hambledon Road (south) | 3               | 0                          | 1                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 0                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 4               | 1                          | 0                  | 0                          |

## Results

### Results Summary for whole modelled period

| Am                         | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.93    | 57.32         | 9.9             | F       | 552                     | 829                           |
| 2 - Hambledon Road (south) | 0.69    | 5.21          | 2.2             | A       | 1275                    | 1913                          |
| 3 - Elettra Avenue         | 0.60    | 7.15          | 1.5             | A       | 630                     | 946                           |
| 4 - Hambledon Road (north) | 0.54    | 5.37          | 1.2             | A       | 660                     | 990                           |

### Main Results for each time segment

#### 11:15 - 11:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 453                   | 113                     | 788                       | 908               | 0.499 | 449                 | 472                             | 0.0               | 1.0             | 7.999     | A                             |
| 2 - Hambledon Road (south) | 1046                  | 262                     | 301                       | 2339              | 0.447 | 1043                | 936                             | 0.0               | 0.8             | 2.813     | A                             |
| 3 - Elettra Avenue         | 517                   | 129                     | 885                       | 1539              | 0.336 | 515                 | 460                             | 0.0               | 0.5             | 3.515     | A                             |
| 4 - Hambledon Road (north) | 541                   | 135                     | 721                       | 1692              | 0.320 | 539                 | 679                             | 0.0               | 0.5             | 3.144     | A                             |

#### 11:30 - 11:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 541                   | 135                     | 943                       | 824               | 0.656 | 538                 | 565                             | 1.0               | 1.9             | 12.737    | B                             |
| 2 - Hambledon Road (south) | 1250                  | 312                     | 361                       | 2294              | 0.545 | 1248                | 1120                            | 0.8               | 1.2             | 3.491     | A                             |
| 3 - Elettra Avenue         | 618                   | 154                     | 1058                      | 1422              | 0.434 | 617                 | 550                             | 0.5               | 0.8             | 4.475     | A                             |
| 4 - Hambledon Road (north) | 646                   | 162                     | 863                       | 1598              | 0.405 | 646                 | 812                             | 0.5               | 0.7             | 3.809     | A                             |

#### 11:45 - 12:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 663                   | 166                     | 1154                      | 712               | 0.931 | 638                 | 691                             | 1.9               | 8.1             | 40.956    | E                             |
| 2 - Hambledon Road (south) | 1530                  | 383                     | 434                       | 2238              | 0.684 | 1527                | 1358                            | 1.2               | 2.2             | 5.113     | A                             |
| 3 - Elettra Avenue         | 756                   | 189                     | 1292                      | 1264              | 0.599 | 754                 | 668                             | 0.8               | 1.5             | 7.033     | A                             |
| 4 - Hambledon Road (north) | 792                   | 198                     | 1055                      | 1470              | 0.539 | 790                 | 991                             | 0.7               | 1.2             | 5.322     | A                             |

#### 12:00 - 12:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 663                   | 166                     | 1157                      | 710               | 0.934 | 656                 | 692                             | 8.1               | 9.9             | 57.322    | F                             |
| 2 - Hambledon Road (south) | 1530                  | 383                     | 441                       | 2232              | 0.686 | 1530                | 1372                            | 2.2               | 2.2             | 5.207     | A                             |
| 3 - Elettra Avenue         | 756                   | 189                     | 1297                      | 1260              | 0.600 | 756                 | 674                             | 1.5               | 1.5             | 7.155     | A                             |
| 4 - Hambledon Road (north) | 792                   | 198                     | 1058                      | 1468              | 0.539 | 792                 | 996                             | 1.2               | 1.2             | 5.369     | A                             |

**12:15 - 12:30**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 541                   | 135                     | 948                       | 822               | 0.658 | 572                 | 567                             | 9.9               | 2.1             | 16.523    | C                             |
| 2 - Hambledon Road (south) | 1250                  | 312                     | 375                       | 2283              | 0.547 | 1253                | 1146                            | 2.2               | 1.2             | 3.563     | A                             |
| 3 - Elettra Avenue         | 618                   | 154                     | 1066                      | 1416              | 0.436 | 620                 | 562                             | 1.5               | 0.8             | 4.550     | A                             |
| 4 - Hambledon Road (north) | 646                   | 162                     | 867                       | 1595              | 0.405 | 648                 | 820                             | 1.2               | 0.7             | 3.843     | A                             |

**12:30 - 12:45**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 453                   | 113                     | 793                       | 905               | 0.501 | 457                 | 474                             | 2.1               | 1.0             | 8.326     | A                             |
| 2 - Hambledon Road (south) | 1046                  | 262                     | 305                       | 2337              | 0.448 | 1048                | 945                             | 1.2               | 0.8             | 2.840     | A                             |
| 3 - Elettra Avenue         | 517                   | 129                     | 889                       | 1536              | 0.337 | 518                 | 464                             | 0.8               | 0.5             | 3.550     | A                             |
| 4 - Hambledon Road (north) | 541                   | 135                     | 725                       | 1690              | 0.320 | 542                 | 683                             | 0.7               | 0.5             | 3.168     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev, PM

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 43.38              | E            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 43.38             | E           |

## 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 |
|----|---------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D8 | 2026 Base + Com Dev + Dev | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 476                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1719                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 1002                    | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 790                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 302                        | 127                | 47                         |
|      | 2 - Hambledon Road (south) | 528             | 102                        | 381                | 708                        |
|      | 3 - Elettra Avenue         | 248             | 557                        | 0                  | 197                        |
|      | 4 - Hambledon Road (north) | 43              | 592                        | 120                | 35                         |

## Vehicle Mix

## Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 3               | 2                          | 0                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 1                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 2               | 3                          | 1                  | 0                          |

## Results

### Results Summary for whole modelled period

| Am                         | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 1.02    | 121.73        | 18.0            | F       | 437                     | 655                           |
| 2 - Hambledon Road (south) | 0.82    | 8.91          | 4.6             | A       | 1577                    | 2366                          |
| 3 - Elettra Avenue         | 1.02    | 88.87         | 28.3            | F       | 919                     | 1379                          |
| 4 - Hambledon Road (north) | 0.76    | 13.45         | 3.2             | B       | 725                     | 1087                          |

### Main Results for each time segment

#### 16:30 - 16:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 358                   | 90                      | 1053                      | 766               | 0.468 | 355                 | 614                             | 0.0               | 0.9             | 8.914     | A                             |
| 2 - Hambledon Road (south) | 1294                  | 324                     | 246                       | 2382              | 0.543 | 1289                | 1162                            | 0.0               | 1.2             | 3.326     | A                             |
| 3 - Elettra Avenue         | 754                   | 189                     | 1065                      | 1417              | 0.532 | 750                 | 470                             | 0.0               | 1.1             | 5.396     | A                             |
| 4 - Hambledon Road (north) | 595                   | 149                     | 1075                      | 1457              | 0.408 | 592                 | 740                             | 0.0               | 0.7             | 4.254     | A                             |

#### 16:45 - 17:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 428                   | 107                     | 1259                      | 655               | 0.653 | 424                 | 734                             | 0.9               | 1.8             | 15.730    | C                             |
| 2 - Hambledon Road (south) | 1545                  | 386                     | 294                       | 2345              | 0.659 | 1542                | 1389                            | 1.2               | 1.9             | 4.533     | A                             |
| 3 - Elettra Avenue         | 901                   | 225                     | 1274                      | 1276              | 0.706 | 896                 | 563                             | 1.1               | 2.3             | 9.419     | A                             |
| 4 - Hambledon Road (north) | 710                   | 178                     | 1285                      | 1317              | 0.539 | 708                 | 885                             | 0.7               | 1.2             | 6.045     | A                             |

#### 17:00 - 17:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 524                   | 131                     | 1505                      | 523               | 1.001 | 486                 | 882                             | 1.8               | 11.4            | 67.531    | F                             |
| 2 - Hambledon Road (south) | 1893                  | 473                     | 347                       | 2305              | 0.821 | 1883                | 1644                            | 1.9               | 4.4             | 8.461     | A                             |
| 3 - Elettra Avenue         | 1103                  | 276                     | 1552                      | 1089              | 1.014 | 1039                | 678                             | 2.3               | 18.3            | 48.241    | E                             |
| 4 - Hambledon Road (north) | 870                   | 217                     | 1525                      | 1157              | 0.752 | 863                 | 1066                            | 1.2               | 2.9             | 12.257    | B                             |

#### 17:15 - 17:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 524                   | 131                     | 1525                      | 513               | 1.022 | 498                 | 892                             | 11.4              | 18.0            | 121.733   | F                             |
| 2 - Hambledon Road (south) | 1893                  | 473                     | 352                       | 2300              | 0.823 | 1892                | 1670                            | 4.4               | 4.6             | 8.915     | A                             |
| 3 - Elettra Avenue         | 1103                  | 276                     | 1560                      | 1083              | 1.019 | 1064                | 684                             | 18.3              | 28.3            | 88.866    | F                             |
| 4 - Hambledon Road (north) | 870                   | 217                     | 1548                      | 1142              | 0.762 | 869                 | 1076                            | 2.9               | 3.2             | 13.453    | B                             |

**17:30 - 17:45**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 428                   | 107                     | 1328                      | 618               | 0.692 | 490                 | 765                             | 18.0              | 2.5             | 39.926    | E                             |
| 2 - Hambledon Road (south) | 1545                  | 386                     | 320                       | 2325              | 0.665 | 1555                | 1499                            | 4.6               | 2.0             | 4.804     | A                             |
| 3 - Elettra Avenue         | 901                   | 225                     | 1291                      | 1265              | 0.712 | 1003                | 584                             | 28.3              | 2.6             | 19.615    | C                             |
| 4 - Hambledon Road (north) | 710                   | 178                     | 1376                      | 1256              | 0.565 | 717                 | 918                             | 3.2               | 1.4             | 6.940     | A                             |

**17:45 - 18:00**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 358                   | 90                      | 1064                      | 760               | 0.472 | 365                 | 619                             | 2.5               | 0.9             | 9.498     | A                             |
| 2 - Hambledon Road (south) | 1294                  | 324                     | 251                       | 2379              | 0.544 | 1297                | 1179                            | 2.0               | 1.2             | 3.387     | A                             |
| 3 - Elettra Avenue         | 754                   | 189                     | 1072                      | 1412              | 0.534 | 760                 | 476                             | 2.6               | 1.2             | 5.610     | A                             |
| 4 - Hambledon Road (north) | 595                   | 149                     | 1086                      | 1449              | 0.410 | 597                 | 746                             | 1.4               | 0.7             | 4.344     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev, SAT

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 14.52              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 14.52             | B           |

## 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 |
|----|---------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D9 | 2026 Base + Com Dev + Dev | SAT              | ONE HOUR             | 11:15              | 12:45               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 570                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1445                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 730                     | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 705                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 357                        | 147                | 66                         |
|      | 2 - Hambledon Road (south) | 394             | 27                         | 384                | 640                        |
|      | 3 - Elettra Avenue         | 179             | 402                        | 0                  | 149                        |
|      | 4 - Hambledon Road (north) | 25              | 521                        | 122                | 37                         |

## Vehicle Mix

## Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 1                  | 0                          |
|      | 2 - Hambledon Road (south) | 3               | 0                          | 1                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 0                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 4               | 1                          | 0                  | 0                          |

## Results

### Results Summary for whole modelled period

| Am                         | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.93    | 57.37         | 9.3             | F       | 523                     | 785                           |
| 2 - Hambledon Road (south) | 0.70    | 5.47          | 2.4             | A       | 1326                    | 1989                          |
| 3 - Elettra Avenue         | 0.63    | 7.70          | 1.7             | A       | 670                     | 1005                          |
| 4 - Hambledon Road (north) | 0.54    | 5.49          | 1.2             | A       | 647                     | 970                           |

### Main Results for each time segment

#### 11:15 - 11:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 429                   | 107                     | 832                       | 884               | 0.485 | 425                 | 449                             | 0.0               | 1.0             | 7.996     | A                             |
| 2 - Hambledon Road (south) | 1088                  | 272                     | 278                       | 2357              | 0.462 | 1084                | 979                             | 0.0               | 0.9             | 2.864     | A                             |
| 3 - Elettra Avenue         | 550                   | 137                     | 873                       | 1547              | 0.355 | 547                 | 489                             | 0.0               | 0.5             | 3.601     | A                             |
| 4 - Hambledon Road (north) | 531                   | 133                     | 752                       | 1672              | 0.317 | 529                 | 669                             | 0.0               | 0.5             | 3.171     | A                             |

#### 11:30 - 11:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 512                   | 128                     | 995                       | 797               | 0.643 | 509                 | 537                             | 1.0               | 1.8             | 12.719    | B                             |
| 2 - Hambledon Road (south) | 1299                  | 325                     | 333                       | 2315              | 0.561 | 1297                | 1172                            | 0.9               | 1.3             | 3.584     | A                             |
| 3 - Elettra Avenue         | 656                   | 164                     | 1045                      | 1431              | 0.459 | 655                 | 586                             | 0.5               | 0.8             | 4.642     | A                             |
| 4 - Hambledon Road (north) | 634                   | 158                     | 899                       | 1573              | 0.403 | 633                 | 800                             | 0.5               | 0.7             | 3.858     | A                             |

#### 11:45 - 12:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 628                   | 157                     | 1217                      | 678               | 0.926 | 604                 | 656                             | 1.8               | 7.7             | 41.233    | E                             |
| 2 - Hambledon Road (south) | 1591                  | 398                     | 400                       | 2263              | 0.703 | 1587                | 1421                            | 1.3               | 2.4             | 5.366     | A                             |
| 3 - Elettra Avenue         | 804                   | 201                     | 1276                      | 1275              | 0.630 | 800                 | 711                             | 0.8               | 1.7             | 7.548     | A                             |
| 4 - Hambledon Road (north) | 776                   | 194                     | 1099                      | 1440              | 0.539 | 774                 | 977                             | 0.7               | 1.2             | 5.435     | A                             |

#### 12:00 - 12:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 628                   | 157                     | 1221                      | 676               | 0.929 | 621                 | 658                             | 7.7               | 9.3             | 57.366    | F                             |
| 2 - Hambledon Road (south) | 1591                  | 398                     | 407                       | 2258              | 0.705 | 1591                | 1435                            | 2.4               | 2.4             | 5.474     | A                             |
| 3 - Elettra Avenue         | 804                   | 201                     | 1281                      | 1272              | 0.632 | 804                 | 717                             | 1.7               | 1.7             | 7.704     | A                             |
| 4 - Hambledon Road (north) | 776                   | 194                     | 1103                      | 1438              | 0.540 | 776                 | 981                             | 1.2               | 1.2             | 5.488     | A                             |

**12:15 - 12:30**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 512                   | 128                     | 1001                      | 794               | 0.646 | 542                 | 540                             | 9.3               | 2.0             | 16.285    | C                             |
| 2 - Hambledon Road (south) | 1299                  | 325                     | 346                       | 2305              | 0.564 | 1303                | 1197                            | 2.4               | 1.3             | 3.662     | A                             |
| 3 - Elettra Avenue         | 656                   | 164                     | 1053                      | 1425              | 0.460 | 660                 | 596                             | 1.7               | 0.9             | 4.730     | A                             |
| 4 - Hambledon Road (north) | 634                   | 158                     | 905                       | 1570              | 0.404 | 636                 | 808                             | 1.2               | 0.7             | 3.896     | A                             |

**12:30 - 12:45**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 429                   | 107                     | 836                       | 882               | 0.487 | 433                 | 451                             | 2.0               | 1.0             | 8.311     | A                             |
| 2 - Hambledon Road (south) | 1088                  | 272                     | 282                       | 2355              | 0.462 | 1090                | 988                             | 1.3               | 0.9             | 2.894     | A                             |
| 3 - Elettra Avenue         | 550                   | 137                     | 878                       | 1544              | 0.356 | 551                 | 493                             | 0.9               | 0.6             | 3.639     | A                             |
| 4 - Hambledon Road (north) | 531                   | 133                     | 756                       | 1669              | 0.318 | 532                 | 673                             | 0.7               | 0.5             | 3.194     | A                             |

# (Default Analysis Set) - 2021 Base, AM-DIRECT

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 12.36              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 12.36             | B           |

## Traffic Demand

### Demand Set Details

| ID  | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D10 | 2021 Base     | AM-DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) | O-D data varies over time |
|------------------------------|-------------------------------|--------------------|---------------------------|---------------------------|
| ✓                            | ✓                             | HV Percentages     | 2.00                      | ✓                         |

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|--------------------|
| 1 - Milton road            |            | DIRECT       | ✓            | 100.000            |
| 2 - Hambledon Road (south) |            | DIRECT       | ✓            | 100.000            |
| 3 - Elettra Avenue         |            | DIRECT       | ✓            | 100.000            |
| 4 - Hambledon Road (north) |            | DIRECT       | ✓            | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

07:30 -  
07:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 416                        | 60                 | 80                         |
|      | 2 - Hambledon Road (south) | 212             | 8                          | 212                | 516                        |
|      | 3 - Elettra Avenue         | 60              | 172                        | 0                  | 112                        |
|      | 4 - Hambledon Road (north) | 20              | 716                        | 72                 | 28                         |

### Demand (PCU/hr)

07:45 -  
08:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 452                        | 132                | 44                         |
|      | 2 - Hambledon Road (south) | 312             | 28                         | 248                | 608                        |
|      | 3 - Elettra Avenue         | 64              | 152                        | 0                  | 156                        |
|      | 4 - Hambledon Road (north) | 24              | 696                        | 80                 | 24                         |

**Demand (PCU/hr)**

08:00 -  
08:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 464                        | 108                | 104                        |
|      | 2 - Hambledon Road (south) | 320             | 4                          | 288                | 552                        |
|      | 3 - Elettra Avenue         | 148             | 172                        | 0                  | 88                         |
|      | 4 - Hambledon Road (north) | 36              | 748                        | 72                 | 48                         |

**Demand (PCU/hr)**

08:15 -  
08:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 400                        | 84                 | 120                        |
|      | 2 - Hambledon Road (south) | 292             | 36                         | 88                 | 612                        |
|      | 3 - Elettra Avenue         | 72              | 260                        | 0                  | 148                        |
|      | 4 - Hambledon Road (north) | 48              | 752                        | 108                | 68                         |

**Demand (PCU/hr)**

08:30 -  
08:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 452                        | 100                | 72                         |
|      | 2 - Hambledon Road (south) | 308             | 48                         | 300                | 700                        |
|      | 3 - Elettra Avenue         | 96              | 212                        | 0                  | 144                        |
|      | 4 - Hambledon Road (north) | 40              | 676                        | 116                | 48                         |

**Demand (PCU/hr)**

08:45 -  
09:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 416                        | 72                 | 76                         |
|      | 2 - Hambledon Road (south) | 380             | 40                         | 424                | 684                        |
|      | 3 - Elettra Avenue         | 96              | 228                        | 0                  | 160                        |
|      | 4 - Hambledon Road (north) | 44              | 868                        | 108                | 40                         |

**Demand (PCU/hr)**

09:00 -  
09:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 356                        | 56                 | 84                         |
|      | 2 - Hambledon Road (south) | 348             | 44                         | 372                | 748                        |
|      | 3 - Elettra Avenue         | 128             | 308                        | 0                  | 136                        |
|      | 4 - Hambledon Road (north) | 44              | 788                        | 16                 | 84                         |

**Demand (PCU/hr)**

09:15 -  
09:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 344                        | 88                 | 28                         |
|      | 2 - Hambledon Road (south) | 356             | 48                         | 212                | 628                        |
|      | 3 - Elettra Avenue         | 128             | 300                        | 0                  | 176                        |
|      | 4 - Hambledon Road (north) | 40              | 632                        | 112                | 48                         |

## Vehicle Mix

## Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 10              | 0                          | 1                  | 6                          |
|      | 3 - Elettra Avenue         | 2               | 8                          | 0                  | 3                          |
|      | 4 - Hambledon Road (north) | 3               | 3                          | 3                  | 0                          |

## Results

### Results Summary for whole modelled period

| Am                         | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.90    | 44.70         | 7.0             | E       | 576                     | 1152                          |
| 2 - Hambledon Road (south) | 0.65    | 4.62          | 1.9             | A       | 1247                    | 2494                          |
| 3 - Elettra Avenue         | 0.46    | 5.57          | 0.9             | A       | 465                     | 929                           |
| 4 - Hambledon Road (north) | 0.63    | 5.93          | 1.7             | A       | 906                     | 1811                          |

### Main Results for each time segment

#### 07:30 - 07:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 556                   | 139                     | 992                       | 798               | 0.696 | 547                 | 291                             | 0.0               | 2.2             | 14.302    | B                             |
| 2 - Hambledon Road (south) | 948                   | 237                     | 237                       | 2389              | 0.397 | 945                 | 1302                            | 0.0               | 0.7             | 2.627     | A                             |
| 3 - Elettra Avenue         | 344                   | 86                      | 840                       | 1569              | 0.219 | 343                 | 342                             | 0.0               | 0.3             | 3.091     | A                             |
| 4 - Hambledon Road (north) | 836                   | 209                     | 451                       | 1872              | 0.447 | 833                 | 733                             | 0.0               | 0.8             | 3.529     | A                             |

#### 07:45 - 08:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 628                   | 157                     | 980                       | 805               | 0.780 | 624                 | 399                             | 2.2               | 3.4             | 19.875    | C                             |
| 2 - Hambledon Road (south) | 1196                  | 299                     | 278                       | 2357              | 0.507 | 1194                | 1325                            | 0.7               | 1.1             | 3.266     | A                             |
| 3 - Elettra Avenue         | 372                   | 93                      | 1015                      | 1451              | 0.256 | 372                 | 458                             | 0.3               | 0.4             | 3.498     | A                             |
| 4 - Hambledon Road (north) | 824                   | 206                     | 555                       | 1802              | 0.457 | 824                 | 831                             | 0.8               | 0.9             | 3.772     | A                             |

#### 08:00 - 08:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 676                   | 169                     | 1043                      | 771               | 0.877 | 666                 | 504                             | 3.4               | 5.9             | 32.174    | D                             |
| 2 - Hambledon Road (south) | 1164                  | 291                     | 328                       | 2319              | 0.502 | 1164                | 1381                            | 1.1               | 1.1             | 3.294     | A                             |
| 3 - Elettra Avenue         | 408                   | 102                     | 1025                      | 1444              | 0.283 | 408                 | 467                             | 0.4               | 0.4             | 3.643     | A                             |
| 4 - Hambledon Road (north) | 904                   | 226                     | 644                       | 1744              | 0.518 | 903                 | 790                             | 0.9               | 1.1             | 4.385     | A                             |

#### 08:15 - 08:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 604                   | 151                     | 1223                      | 675               | 0.895 | 599                 | 412                             | 5.9               | 7.0             | 44.696    | E                             |
| 2 - Hambledon Road (south) | 1028                  | 257                     | 378                       | 2281              | 0.451 | 1029                | 1445                            | 1.1               | 0.9             | 3.058     | A                             |
| 3 - Elettra Avenue         | 480                   | 120                     | 1126                      | 1376              | 0.349 | 479                 | 280                             | 0.4               | 0.6             | 4.238     | A                             |
| 4 - Hambledon Road (north) | 976                   | 244                     | 660                       | 1733              | 0.563 | 975                 | 946                             | 1.1               | 1.3             | 4.861     | A                             |

**08:30 - 08:45**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 624                   | 156                     | 1101                      | 740               | 0.843 | 627                 | 444                             | 7.0               | 6.2             | 34.268    | D                             |
| 2 - Hambledon Road (south) | 1356                  | 339                     | 339                       | 2311              | 0.587 | 1354                | 1389                            | 0.9               | 1.5             | 3.952     | A                             |
| 3 - Elettra Avenue         | 452                   | 113                     | 1177                      | 1341              | 0.337 | 452                 | 515                             | 0.6               | 0.5             | 4.259     | A                             |
| 4 - Hambledon Road (north) | 880                   | 220                     | 664                       | 1730              | 0.509 | 881                 | 966                             | 1.3               | 1.1             | 4.351     | A                             |

**08:45 - 09:00**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 564                   | 141                     | 1281                      | 643               | 0.877 | 563                 | 519                             | 6.2               | 6.5             | 43.975    | E                             |
| 2 - Hambledon Road (south) | 1528                  | 382                     | 296                       | 2344              | 0.652 | 1526                | 1548                            | 1.5               | 1.9             | 4.624     | A                             |
| 3 - Elettra Avenue         | 484                   | 121                     | 1218                      | 1314              | 0.368 | 484                 | 604                             | 0.5               | 0.6             | 4.563     | A                             |
| 4 - Hambledon Road (north) | 1060                  | 265                     | 743                       | 1677              | 0.632 | 1057                | 959                             | 1.1               | 1.7             | 5.929     | A                             |

**09:00 - 09:15**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 496                   | 124                     | 1241                      | 665               | 0.746 | 509                 | 520                             | 6.5               | 3.3             | 25.330    | D                             |
| 2 - Hambledon Road (south) | 1512                  | 378                     | 243                       | 2384              | 0.634 | 1512                | 1506                            | 1.9               | 1.8             | 4.351     | A                             |
| 3 - Elettra Avenue         | 572                   | 143                     | 1309                      | 1252              | 0.457 | 571                 | 447                             | 0.6               | 0.9             | 5.568     | A                             |
| 4 - Hambledon Road (north) | 932                   | 233                     | 827                       | 1622              | 0.575 | 933                 | 1053                            | 1.7               | 1.4             | 5.368     | A                             |

**09:15 - 09:30**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 460                   | 115                     | 1141                      | 718               | 0.640 | 465                 | 524                             | 3.3               | 1.9             | 14.963    | B                             |
| 2 - Hambledon Road (south) | 1244                  | 311                     | 278                       | 2358              | 0.528 | 1247                | 1329                            | 1.8               | 1.2             | 3.435     | A                             |
| 3 - Elettra Avenue         | 604                   | 151                     | 1112                      | 1386              | 0.436 | 604                 | 413                             | 0.9               | 0.8             | 4.856     | A                             |
| 4 - Hambledon Road (north) | 832                   | 208                     | 833                       | 1618              | 0.514 | 833                 | 883                             | 1.4               | 1.1             | 4.710     | A                             |

# (Default Analysis Set) - 2021 Base, PM-DIRECT

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 9.26               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 9.26              | A           |

## Traffic Demand

### Demand Set Details

| ID  | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D11 | 2021 Base     | PM-DIRECT        | DIRECT               | 16:30              | 18:30               | 120                      | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) | O-D data varies over time |
|------------------------------|-------------------------------|--------------------|---------------------------|---------------------------|
| ✓                            | ✓                             | HV Percentages     | 2.00                      | ✓                         |

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|--------------------|
| 1 - Milton road            |            | DIRECT       | ✓            | 100.000            |
| 2 - Hambledon Road (south) |            | DIRECT       | ✓            | 100.000            |
| 3 - Elettra Avenue         |            | DIRECT       | ✓            | 100.000            |
| 4 - Hambledon Road (north) |            | DIRECT       | ✓            | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

16:30 -  
16:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 340                        | 72                 | 76                         |
|      | 2 - Hambledon Road (south) | 480             | 76                         | 208                | 664                        |
|      | 3 - Elettra Avenue         | 184             | 296                        | 0                  | 164                        |
|      | 4 - Hambledon Road (north) | 24              | 656                        | 72                 | 40                         |

### Demand (PCU/hr)

16:45 -  
17:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 248                        | 80                 | 36                         |
|      | 2 - Hambledon Road (south) | 604             | 68                         | 228                | 672                        |
|      | 3 - Elettra Avenue         | 168             | 344                        | 0                  | 144                        |
|      | 4 - Hambledon Road (north) | 52              | 488                        | 104                | 12                         |

**Demand (PCU/hr)**

17:00 -  
17:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 288                        | 80                 | 64                         |
|      | 2 - Hambledon Road (south) | 500             | 140                        | 260                | 672                        |
|      | 3 - Elettra Avenue         | 224             | 456                        | 0                  | 200                        |
|      | 4 - Hambledon Road (north) | 48              | 620                        | 80                 | 32                         |

**Demand (PCU/hr)**

17:15 -  
17:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 316                        | 124                | 52                         |
|      | 2 - Hambledon Road (south) | 464             | 96                         | 220                | 724                        |
|      | 3 - Elettra Avenue         | 212             | 340                        | 0                  | 172                        |
|      | 4 - Hambledon Road (north) | 24              | 560                        | 92                 | 48                         |

**Demand (PCU/hr)**

17:30 -  
17:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 360                        | 68                 | 28                         |
|      | 2 - Hambledon Road (south) | 516             | 92                         | 204                | 688                        |
|      | 3 - Elettra Avenue         | 192             | 336                        | 0                  | 144                        |
|      | 4 - Hambledon Road (north) | 44              | 636                        | 108                | 44                         |

**Demand (PCU/hr)**

17:45 -  
18:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 288                        | 96                 | 68                         |
|      | 2 - Hambledon Road (south) | 436             | 56                         | 196                | 604                        |
|      | 3 - Elettra Avenue         | 148             | 264                        | 0                  | 108                        |
|      | 4 - Hambledon Road (north) | 40              | 428                        | 108                | 16                         |

**Demand (PCU/hr)**

18:00 -  
18:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 304                        | 88                 | 44                         |
|      | 2 - Hambledon Road (south) | 544             | 40                         | 124                | 588                        |
|      | 3 - Elettra Avenue         | 156             | 260                        | 0                  | 120                        |
|      | 4 - Hambledon Road (north) | 56              | 584                        | 88                 | 16                         |

**Demand (PCU/hr)**

18:15 -  
18:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 408                        | 120                | 60                         |
|      | 2 - Hambledon Road (south) | 396             | 52                         | 248                | 596                        |
|      | 3 - Elettra Avenue         | 172             | 396                        | 0                  | 128                        |
|      | 4 - Hambledon Road (north) | 40              | 572                        | 84                 | 16                         |

## Vehicle Mix

## Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 10              | 0                          | 1                  | 6                          |
|      | 3 - Elettra Avenue         | 2               | 8                          | 0                  | 3                          |
|      | 4 - Hambledon Road (north) | 3               | 3                          | 3                  | 0                          |

## Results

### Results Summary for whole modelled period

| Am                         | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.81    | 22.90         | 3.8             | C       | 464                     | 927                           |
| 2 - Hambledon Road (south) | 0.66    | 4.73          | 2.0             | A       | 1432                    | 2864                          |
| 3 - Elettra Avenue         | 0.74    | 11.90         | 2.9             | B       | 666                     | 1332                          |
| 4 - Hambledon Road (north) | 0.60    | 7.08          | 1.5             | A       | 729                     | 1458                          |

### Main Results for each time segment

#### 16:30 - 16:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 488                   | 122                     | 1133                      | 723               | 0.675 | 480                 | 684                             | 0.0               | 2.0             | 14.797    | B                             |
| 2 - Hambledon Road (south) | 1428                  | 357                     | 257                       | 2374              | 0.602 | 1422                | 1356                            | 0.0               | 1.6             | 3.985     | A                             |
| 3 - Elettra Avenue         | 644                   | 161                     | 1329                      | 1239              | 0.520 | 640                 | 349                             | 0.0               | 1.1             | 6.269     | A                             |
| 4 - Hambledon Road (north) | 792                   | 198                     | 1030                      | 1486              | 0.533 | 787                 | 938                             | 0.0               | 1.2             | 5.245     | A                             |

#### 16:45 - 17:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 364                   | 91                      | 1016                      | 785               | 0.464 | 369                 | 823                             | 2.0               | 0.9             | 8.967     | A                             |
| 2 - Hambledon Road (south) | 1572                  | 393                     | 233                       | 2392              | 0.657 | 1570                | 1152                            | 1.6               | 2.0             | 4.650     | A                             |
| 3 - Elettra Avenue         | 656                   | 164                     | 1392                      | 1197              | 0.548 | 655                 | 412                             | 1.1               | 1.3             | 7.010     | A                             |
| 4 - Hambledon Road (north) | 656                   | 164                     | 1182                      | 1385              | 0.474 | 657                 | 865                             | 1.2               | 0.9             | 5.080     | A                             |

#### 17:00 - 17:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 432                   | 108                     | 1322                      | 622               | 0.695 | 427                 | 771                             | 0.9               | 2.2             | 18.534    | C                             |
| 2 - Hambledon Road (south) | 1572                  | 393                     | 254                       | 2376              | 0.662 | 1572                | 1495                            | 2.0               | 2.0             | 4.730     | A                             |
| 3 - Elettra Avenue         | 880                   | 220                     | 1407                      | 1186              | 0.742 | 874                 | 419                             | 1.3               | 2.9             | 11.897    | B                             |
| 4 - Hambledon Road (north) | 780                   | 195                     | 1315                      | 1297              | 0.602 | 778                 | 965                             | 0.9               | 1.5             | 7.080     | A                             |

#### 17:15 - 17:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 492                   | 123                     | 1141                      | 719               | 0.685 | 492                 | 701                             | 2.2               | 2.2             | 16.279    | C                             |
| 2 - Hambledon Road (south) | 1504                  | 376                     | 316                       | 2328              | 0.646 | 1504                | 1317                            | 2.0               | 2.0             | 4.630     | A                             |
| 3 - Elettra Avenue         | 724                   | 181                     | 1384                      | 1201              | 0.603 | 729                 | 436                             | 2.9               | 1.6             | 8.098     | A                             |
| 4 - Hambledon Road (north) | 724                   | 181                     | 1116                      | 1429              | 0.507 | 726                 | 997                             | 1.5               | 1.1             | 5.259     | A                             |

**17:30 - 17:45**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 456                   | 114                     | 1215                      | 679               | 0.672 | 456                 | 752                             | 2.2               | 2.2             | 16.712    | C                             |
| 2 - Hambledon Road (south) | 1500                  | 375                     | 249                       | 2380              | 0.630 | 1500                | 1422                            | 2.0               | 1.8             | 4.349     | A                             |
| 3 - Elettra Avenue         | 672                   | 168                     | 1369                      | 1212              | 0.554 | 673                 | 381                             | 1.6               | 1.3             | 7.056     | A                             |
| 4 - Hambledon Road (north) | 832                   | 208                     | 1137                      | 1415              | 0.588 | 831                 | 905                             | 1.1               | 1.4             | 6.293     | A                             |

**17:45 - 18:00**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 452                   | 113                     | 877                       | 860               | 0.525 | 456                 | 626                             | 2.2               | 1.2             | 9.229     | A                             |
| 2 - Hambledon Road (south) | 1292                  | 323                     | 289                       | 2349              | 0.550 | 1294                | 1044                            | 1.8               | 1.3             | 3.629     | A                             |
| 3 - Elettra Avenue         | 520                   | 130                     | 1182                      | 1338              | 0.389 | 523                 | 401                             | 1.3               | 0.7             | 4.666     | A                             |
| 4 - Hambledon Road (north) | 592                   | 148                     | 907                       | 1568              | 0.377 | 595                 | 798                             | 1.4               | 0.6             | 3.810     | A                             |

**18:00 - 18:15**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 436                   | 109                     | 987                       | 801               | 0.544 | 436                 | 755                             | 1.2               | 1.2             | 10.121    | B                             |
| 2 - Hambledon Road (south) | 1296                  | 324                     | 236                       | 2390              | 0.542 | 1296                | 1186                            | 1.3               | 1.3             | 3.518     | A                             |
| 3 - Elettra Avenue         | 536                   | 134                     | 1232                      | 1304              | 0.411 | 536                 | 300                             | 0.7               | 0.7             | 4.929     | A                             |
| 4 - Hambledon Road (north) | 744                   | 186                     | 1000                      | 1507              | 0.494 | 743                 | 768                             | 0.6               | 1.0             | 4.825     | A                             |

**18:15 - 18:30**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 588                   | 147                     | 1119                      | 730               | 0.805 | 578                 | 608                             | 1.2               | 3.8             | 22.904    | C                             |
| 2 - Hambledon Road (south) | 1292                  | 323                     | 277                       | 2358              | 0.548 | 1292                | 1420                            | 1.3               | 1.3             | 3.571     | A                             |
| 3 - Elettra Avenue         | 696                   | 174                     | 1119                      | 1381              | 0.504 | 695                 | 449                             | 0.7               | 1.1             | 5.542     | A                             |
| 4 - Hambledon Road (north) | 712                   | 178                     | 1015                      | 1496              | 0.476 | 712                 | 799                             | 1.0               | 0.9             | 4.712     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev, AM-DIRECT

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 55.93              | F            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 55.93             | F           |

## Traffic Demand

### Demand Set Details

| ID  | Scenario name       | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D12 | 2026 Base + Com Dev | AM-DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) | O-D data varies over time |
|------------------------------|-------------------------------|--------------------|---------------------------|---------------------------|
| ✓                            | ✓                             | HV Percentages     | 2.00                      | ✓                         |

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|--------------------|
| 1 - Milton road            |            | DIRECT       | ✓            | 100.000            |
| 2 - Hambledon Road (south) |            | DIRECT       | ✓            | 100.000            |
| 3 - Elettra Avenue         |            | DIRECT       | ✓            | 100.000            |
| 4 - Hambledon Road (north) |            | DIRECT       | ✓            | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

07:30 -  
07:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 430                        | 104                | 83                         |
|      | 2 - Hambledon Road (south) | 219             | 8                          | 288                | 534                        |
|      | 3 - Elettra Avenue         | 90              | 225                        | 0                  | 131                        |
|      | 4 - Hambledon Road (north) | 21              | 741                        | 97                 | 29                         |

### Demand (PCU/hr)

07:45 -  
08:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 468                        | 178                | 46                         |
|      | 2 - Hambledon Road (south) | 323             | 29                         | 325                | 629                        |
|      | 3 - Elettra Avenue         | 94              | 204                        | 0                  | 177                        |
|      | 4 - Hambledon Road (north) | 25              | 720                        | 106                | 25                         |

### Demand (PCU/hr)

08:00 -  
08:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 480                        | 153                | 108                        |
|      | 2 - Hambledon Road (south) | 331             | 4                          | 367                | 571                        |
|      | 3 - Elettra Avenue         | 181             | 225                        | 0                  | 106                        |
|      | 4 - Hambledon Road (north) | 37              | 774                        | 97                 | 50                         |

### Demand (PCU/hr)

08:15 -  
08:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 414                        | 128                | 124                        |
|      | 2 - Hambledon Road (south) | 302             | 37                         | 160                | 633                        |
|      | 3 - Elettra Avenue         | 102             | 316                        | 0                  | 168                        |
|      | 4 - Hambledon Road (north) | 50              | 778                        | 135                | 70                         |

### Demand (PCU/hr)

08:30 -  
08:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 468                        | 145                | 74                         |
|      | 2 - Hambledon Road (south) | 319             | 50                         | 379                | 724                        |
|      | 3 - Elettra Avenue         | 127             | 266                        | 0                  | 164                        |
|      | 4 - Hambledon Road (north) | 41              | 699                        | 143                | 50                         |

### Demand (PCU/hr)

08:45 -  
09:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 430                        | 116                | 79                         |
|      | 2 - Hambledon Road (south) | 393             | 41                         | 507                | 708                        |
|      | 3 - Elettra Avenue         | 127             | 283                        | 0                  | 181                        |
|      | 4 - Hambledon Road (north) | 46              | 898                        | 135                | 41                         |

### Demand (PCU/hr)

09:00 -  
09:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 368                        | 99                 | 87                         |
|      | 2 - Hambledon Road (south) | 360             | 46                         | 454                | 774                        |
|      | 3 - Elettra Avenue         | 160             | 365                        | 0                  | 156                        |
|      | 4 - Hambledon Road (north) | 46              | 815                        | 40                 | 87                         |

### Demand (PCU/hr)

09:15 -  
09:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 356                        | 132                | 29                         |
|      | 2 - Hambledon Road (south) | 368             | 50                         | 288                | 650                        |
|      | 3 - Elettra Avenue         | 160             | 357                        | 0                  | 197                        |
|      | 4 - Hambledon Road (north) | 41              | 654                        | 139                | 50                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 10              | 0                          | 1                  | 6                          |
|      | 3 - Elettra Avenue         | 2               | 8                          | 0                  | 3                          |
|      | 4 - Hambledon Road (north) | 3               | 3                          | 3                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 1.08    | 279.73        | 48.9            | F       | 637                     | 1275                          |
| 2 - Hambledon Road (south) | 0.72    | 5.79          | 2.6             | A       | 1359                    | 2718                          |
| 3 - Elettra Avenue         | 0.56    | 6.98          | 1.3             | A       | 570                     | 1141                          |
| 4 - Hambledon Road (north) | 0.70    | 7.40          | 2.3             | A       | 960                     | 1920                          |

### Main Results for each time segment

#### 07:30 - 07:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 617                   | 154                     | 1095                      | 743               | 0.830 | 600                 | 329                             | 0.0               | 4.3             | 23.615    | C                             |
| 2 - Hambledon Road (south) | 1049                  | 262                     | 307                       | 2335              | 0.449 | 1046                | 1388                            | 0.0               | 0.9             | 2.930     | A                             |
| 3 - Elettra Avenue         | 446                   | 112                     | 868                       | 1550              | 0.288 | 444                 | 485                             | 0.0               | 0.4             | 3.427     | A                             |
| 4 - Hambledon Road (north) | 888                   | 222                     | 540                       | 1813              | 0.490 | 884                 | 772                             | 0.0               | 1.0             | 3.959     | A                             |

#### 07:45 - 08:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 692                   | 173                     | 1084                      | 749               | 0.924 | 677                 | 441                             | 4.3               | 8.1             | 42.934    | E                             |
| 2 - Hambledon Road (south) | 1306                  | 327                     | 350                       | 2302              | 0.567 | 1304                | 1411                            | 0.9               | 1.4             | 3.792     | A                             |
| 3 - Elettra Avenue         | 475                   | 119                     | 1051                      | 1427              | 0.333 | 475                 | 603                             | 0.4               | 0.5             | 3.967     | A                             |
| 4 - Hambledon Road (north) | 876                   | 219                     | 649                       | 1740              | 0.503 | 876                 | 876                             | 1.0               | 1.0             | 4.271     | A                             |

#### 08:00 - 08:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 741                   | 185                     | 1149                      | 714               | 1.037 | 693                 | 548                             | 8.1               | 20.0            | 90.046    | F                             |
| 2 - Hambledon Road (south) | 1273                  | 318                     | 390                       | 2271              | 0.560 | 1273                | 1452                            | 1.4               | 1.4             | 3.799     | A                             |
| 3 - Elettra Avenue         | 512                   | 128                     | 1055                      | 1424              | 0.359 | 512                 | 609                             | 0.5               | 0.6             | 4.140     | A                             |
| 4 - Hambledon Road (north) | 958                   | 240                     | 741                       | 1679              | 0.571 | 957                 | 826                             | 1.0               | 1.3             | 5.098     | A                             |

### 08:15 - 08:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 666                   | 167                     | 1334                      | 615               | 1.083 | 609                 | 454                             | 20.0              | 34.2            | 173.535   | F                             |
| 2 - Hambledon Road (south) | 1132                  | 283                     | 433                       | 2238              | 0.506 | 1133                | 1510                            | 1.4               | 1.1             | 3.452     | A                             |
| 3 - Elettra Avenue         | 586                   | 147                     | 1152                      | 1359              | 0.431 | 585                 | 414                             | 0.6               | 0.8             | 4.911     | A                             |
| 4 - Hambledon Road (north) | 1033                  | 258                     | 757                       | 1668              | 0.619 | 1032                | 981                             | 1.3               | 1.6             | 5.786     | A                             |

### 08:30 - 08:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 687                   | 172                     | 1209                      | 682               | 1.007 | 673                 | 486                             | 34.2              | 37.7            | 205.791   | F                             |
| 2 - Hambledon Road (south) | 1472                  | 368                     | 416                       | 2251              | 0.654 | 1469                | 1467                            | 1.1               | 2.0             | 4.815     | A                             |
| 3 - Elettra Avenue         | 557                   | 139                     | 1224                      | 1310              | 0.425 | 557                 | 660                             | 0.8               | 0.8             | 5.034     | A                             |
| 4 - Hambledon Road (north) | 933                   | 233                     | 761                       | 1665              | 0.560 | 934                 | 1020                            | 1.6               | 1.3             | 5.059     | A                             |

### 08:45 - 09:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 625                   | 156                     | 1394                      | 583               | 1.072 | 580                 | 565                             | 37.7              | 48.9            | 279.730   | F                             |
| 2 - Hambledon Road (south) | 1649                  | 412                     | 358                       | 2296              | 0.718 | 1646                | 1616                            | 2.0               | 2.6             | 5.795     | A                             |
| 3 - Elettra Avenue         | 591                   | 148                     | 1252                      | 1291              | 0.458 | 591                 | 752                             | 0.8               | 0.9             | 5.407     | A                             |
| 4 - Hambledon Road (north) | 1120                  | 280                     | 843                       | 1611              | 0.695 | 1116                | 1000                            | 1.3               | 2.3             | 7.403     | A                             |

### 09:00 - 09:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 554                   | 139                     | 1354                      | 605               | 0.916 | 592                 | 566                             | 48.9              | 39.4            | 267.072   | F                             |
| 2 - Hambledon Road (south) | 1634                  | 409                     | 322                       | 2324              | 0.703 | 1634                | 1624                            | 2.6               | 2.5             | 5.492     | A                             |
| 3 - Elettra Avenue         | 681                   | 170                     | 1354                      | 1222              | 0.557 | 679                 | 602                             | 0.9               | 1.3             | 6.976     | A                             |
| 4 - Hambledon Road (north) | 988                   | 247                     | 930                       | 1553              | 0.636 | 990                 | 1103                            | 2.3               | 1.8             | 6.564     | A                             |

### 09:15 - 09:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 517                   | 129                     | 1252                      | 659               | 0.785 | 642                 | 570                             | 39.4              | 8.1             | 141.565   | F                             |
| 2 - Hambledon Road (south) | 1356                  | 339                     | 393                       | 2269              | 0.598 | 1360                | 1502                            | 2.5               | 1.6             | 4.197     | A                             |
| 3 - Elettra Avenue         | 714                   | 179                     | 1173                      | 1345              | 0.531 | 714                 | 580                             | 1.3               | 1.2             | 6.023     | A                             |
| 4 - Hambledon Road (north) | 884                   | 221                     | 936                       | 1549              | 0.571 | 886                 | 951                             | 1.8               | 1.4             | 5.579     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev, AM-DIRECT

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 130.85             | F            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 130.85            | F           |

## Traffic Demand

### Demand Set Details

| ID  | Scenario name             | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|---------------------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D13 | 2026 Base + Com Dev + Dev | AM-DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) | O-D data varies over time |
|------------------------------|-------------------------------|--------------------|---------------------------|---------------------------|
| ✓                            | ✓                             | HV Percentages     | 2.00                      | ✓                         |

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|--------------------|
| 1 - Milton road            |            | DIRECT       | ✓            | 100.000            |
| 2 - Hambledon Road (south) |            | DIRECT       | ✓            | 100.000            |
| 3 - Elettra Avenue         |            | DIRECT       | ✓            | 100.000            |
| 4 - Hambledon Road (north) |            | DIRECT       | ✓            | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

07:30 -  
07:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 425                        | 125                | 83                         |
|      | 2 - Hambledon Road (south) | 215             | 8                          | 402                | 533                        |
|      | 3 - Elettra Avenue         | 103             | 297                        | 0                  | 141                        |
|      | 4 - Hambledon Road (north) | 21              | 739                        | 115                | 29                         |

**Demand (PCU/hr)**

07:45 -  
08:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 463                        | 199                | 46                         |
|      | 2 - Hambledon Road (south) | 319             | 29                         | 439                | 628                        |
|      | 3 - Elettra Avenue         | 107             | 277                        | 0                  | 187                        |
|      | 4 - Hambledon Road (north) | 25              | 718                        | 123                | 25                         |

**Demand (PCU/hr)**

08:00 -  
08:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 475                        | 174                | 108                        |
|      | 2 - Hambledon Road (south) | 327             | 4                          | 481                | 570                        |
|      | 3 - Elettra Avenue         | 194             | 297                        | 0                  | 116                        |
|      | 4 - Hambledon Road (north) | 37              | 772                        | 115                | 50                         |

**Demand (PCU/hr)**

08:15 -  
08:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 409                        | 150                | 124                        |
|      | 2 - Hambledon Road (south) | 298             | 37                         | 274                | 632                        |
|      | 3 - Elettra Avenue         | 115             | 388                        | 0                  | 178                        |
|      | 4 - Hambledon Road (north) | 50              | 776                        | 152                | 70                         |

**Demand (PCU/hr)**

08:30 -  
08:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 463                        | 166                | 74                         |
|      | 2 - Hambledon Road (south) | 315             | 50                         | 493                | 723                        |
|      | 3 - Elettra Avenue         | 140             | 339                        | 0                  | 174                        |
|      | 4 - Hambledon Road (north) | 41              | 697                        | 160                | 50                         |

**Demand (PCU/hr)**

08:45 -  
09:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 425                        | 137                | 79                         |
|      | 2 - Hambledon Road (south) | 389             | 41                         | 622                | 707                        |
|      | 3 - Elettra Avenue         | 140             | 355                        | 0                  | 191                        |
|      | 4 - Hambledon Road (north) | 46              | 896                        | 152                | 41                         |

**Demand (PCU/hr)**

09:00 -  
09:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 363                        | 121                | 87                         |
|      | 2 - Hambledon Road (south) | 356             | 46                         | 568                | 773                        |
|      | 3 - Elettra Avenue         | 173             | 438                        | 0                  | 166                        |
|      | 4 - Hambledon Road (north) | 46              | 813                        | 57                 | 87                         |

**Demand (PCU/hr)**

09:15 -  
09:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 351                        | 154                | 29                         |
|      | 2 - Hambledon Road (south) | 364             | 50                         | 402                | 649                        |
|      | 3 - Elettra Avenue         | 173             | 430                        | 0                  | 207                        |
|      | 4 - Hambledon Road (north) | 41              | 652                        | 156                | 50                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 10              | 0                          | 1                  | 6                          |
|      | 3 - Elettra Avenue         | 2               | 8                          | 0                  | 3                          |
|      | 4 - Hambledon Road (north) | 3               | 3                          | 3                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 1.20    | 716.09        | 115.4           | F       | 654                     | 1308                          |
| 2 - Hambledon Road (south) | 0.77    | 7.10          | 3.4             | A       | 1468                    | 2936                          |
| 3 - Elettra Avenue         | 0.63    | 8.21          | 1.7             | A       | 666                     | 1332                          |
| 4 - Hambledon Road (north) | 0.73    | 8.55          | 2.7             | A       | 975                     | 1951                          |

### Main Results for each time segment

#### 07:30 - 07:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 633                   | 158                     | 1183                      | 696               | 0.909 | 606                 | 338                             | 0.0               | 6.9             | 34.239    | D                             |
| 2 - Hambledon Road (south) | 1158                  | 290                     | 342                       | 2308              | 0.502 | 1154                | 1446                            | 0.0               | 1.0             | 3.255     | A                             |
| 3 - Elettra Avenue         | 541                   | 135                     | 862                       | 1555              | 0.348 | 539                 | 635                             | 0.0               | 0.6             | 3.736     | A                             |
| 4 - Hambledon Road (north) | 904                   | 226                     | 621                       | 1759              | 0.514 | 900                 | 780                             | 0.0               | 1.1             | 4.275     | A                             |

#### 07:45 - 08:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 708                   | 177                     | 1172                      | 702               | 1.008 | 673                 | 450                             | 6.9               | 15.7            | 75.728    | F                             |
| 2 - Hambledon Road (south) | 1415                  | 354                     | 380                       | 2279              | 0.621 | 1412                | 1464                            | 1.0               | 1.7             | 4.350     | A                             |
| 3 - Elettra Avenue         | 571                   | 143                     | 1045                      | 1431              | 0.399 | 570                 | 748                             | 0.6               | 0.7             | 4.402     | A                             |
| 4 - Hambledon Road (north) | 891                   | 223                     | 731                       | 1686              | 0.529 | 891                 | 884                             | 1.1               | 1.1             | 4.645     | A                             |

#### 08:00 - 08:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 757                   | 189                     | 1237                      | 667               | 1.134 | 662                 | 557                             | 15.7              | 39.5            | 170.057   | F                             |
| 2 - Hambledon Road (south) | 1382                  | 346                     | 410                       | 2256              | 0.613 | 1382                | 1489                            | 1.7               | 1.7             | 4.326     | A                             |
| 3 - Elettra Avenue         | 607                   | 152                     | 1041                      | 1434              | 0.423 | 607                 | 751                             | 0.7               | 0.8             | 4.582     | A                             |
| 4 - Hambledon Road (north) | 974                   | 244                     | 821                       | 1625              | 0.599 | 973                 | 826                             | 1.1               | 1.5             | 5.641     | A                             |

### 08:15 - 08:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 683                   | 171                     | 1421                      | 569               | 1.201 | 568                 | 463                             | 39.5              | 68.3            | 345.492   | F                             |
| 2 - Hambledon Road (south) | 1241                  | 310                     | 445                       | 2229              | 0.557 | 1242                | 1544                            | 1.7               | 1.3             | 3.851     | A                             |
| 3 - Elettra Avenue         | 681                   | 170                     | 1134                      | 1371              | 0.497 | 680                 | 553                             | 0.8               | 1.0             | 5.505     | A                             |
| 4 - Hambledon Road (north) | 1048                  | 262                     | 838                       | 1615              | 0.649 | 1047                | 976                             | 1.5               | 1.9             | 6.478     | A                             |

### 08:30 - 08:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 703                   | 176                     | 1297                      | 635               | 1.108 | 634                 | 495                             | 68.3              | 85.6            | 470.135   | F                             |
| 2 - Hambledon Road (south) | 1581                  | 395                     | 443                       | 2231              | 0.709 | 1576                | 1488                            | 1.3               | 2.5             | 5.727     | A                             |
| 3 - Elettra Avenue         | 653                   | 163                     | 1223                      | 1311              | 0.498 | 653                 | 796                             | 1.0               | 1.0             | 5.775     | A                             |
| 4 - Hambledon Road (north) | 948                   | 237                     | 843                       | 1611              | 0.588 | 949                 | 1033                            | 1.9               | 1.5             | 5.593     | A                             |

### 08:45 - 09:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 641                   | 160                     | 1480                      | 537               | 1.194 | 536                 | 574                             | 85.6              | 111.8           | 663.177   | F                             |
| 2 - Hambledon Road (south) | 1759                  | 440                     | 375                       | 2283              | 0.770 | 1755                | 1642                            | 2.5               | 3.4             | 7.096     | A                             |
| 3 - Elettra Avenue         | 686                   | 172                     | 1236                      | 1302              | 0.527 | 686                 | 894                             | 1.0               | 1.2             | 6.156     | A                             |
| 4 - Hambledon Road (north) | 1135                  | 284                     | 924                       | 1557              | 0.729 | 1130                | 998                             | 1.5               | 2.7             | 8.552     | A                             |

### 09:00 - 09:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 571                   | 143                     | 1442                      | 557               | 1.024 | 556                 | 575                             | 111.8             | 115.4           | 716.093   | F                             |
| 2 - Hambledon Road (south) | 1743                  | 436                     | 335                       | 2314              | 0.753 | 1744                | 1663                            | 3.4               | 3.3             | 6.631     | A                             |
| 3 - Elettra Avenue         | 777                   | 194                     | 1333                      | 1236              | 0.629 | 775                 | 745                             | 1.2               | 1.7             | 8.208     | A                             |
| 4 - Hambledon Road (north) | 1003                  | 251                     | 1011                      | 1499              | 0.669 | 1005                | 1097                            | 2.7               | 2.1             | 7.499     | A                             |

### 09:15 - 09:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 534                   | 134                     | 1341                      | 612               | 0.873 | 606                 | 579                             | 115.4             | 97.4            | 632.694   | F                             |
| 2 - Hambledon Road (south) | 1465                  | 366                     | 423                       | 2246              | 0.652 | 1470                | 1523                            | 3.3               | 2.0             | 4.916     | A                             |
| 3 - Elettra Avenue         | 810                   | 203                     | 1195                      | 1330              | 0.609 | 810                 | 699                             | 1.7               | 1.7             | 7.323     | A                             |
| 4 - Hambledon Road (north) | 899                   | 225                     | 1018                      | 1494              | 0.602 | 901                 | 987                             | 2.1               | 1.6             | 6.245     | A                             |



## Appendix B

TRL Junctions Report:

Existing Geometry – Entry Sim

Baseline Traffic; Baseline + Outline Application; and, Baseline + Outline & Net Development

| Junctions 10                                                                                                                                                     |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| ARCADY 10 - Roundabout Module                                                                                                                                    |  |  |  |  |  |  |  |
| Version: 10.0.2.1574<br>© Copyright TRL Software Limited, 2021                                                                                                   |  |  |  |  |  |  |  |
| 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: Hambledon Road\_Milton Road\_Elettra Av (2021) Entry Sim #RevB.j10

Path: P:\19000's\19235\Technical\FINAL

Report generation date: 01/12/2021 11:22:39

»(Default Analysis Set) - 2021 Base, AM-DIRECT

»(Default Analysis Set) - 2021 Base, PM-DIRECT

### Summary of junction performance

|                                  | AM-DIRECT |             |           |     |     | PM-DIRECT |             |           |     |     |
|----------------------------------|-----------|-------------|-----------|-----|-----|-----------|-------------|-----------|-----|-----|
|                                  | Set ID    | Queue (PCU) | Delay (s) | RFC | LOS | Set ID    | Queue (PCU) | Delay (s) | RFC | LOS |
| A1 [Lane Simulation] - 2021 Base |           |             |           |     |     |           |             |           |     |     |
| 1 - Milton road                  | D10       | 9.8         | 49.94     |     | E   | D11       | 4.3         | 22.81     |     | C   |
| 2 - Hambledon Road (south)       |           | 3.1         | 7.13      |     | A   |           | 3.5         | 7.79      |     | A   |
| 3 - Elettra Avenue               |           | 2.5         | 13.79     |     | B   |           | 23.5        | 70.17     |     | F   |
| 4 - Hambledon Road (north)       |           | 2.3         | 8.06      |     | A   |           | 2.2         | 9.57      |     | A   |

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

### File summary

#### File Description

|             |                                             |
|-------------|---------------------------------------------|
| Title       | Hambledon Road/ Milton Road/ Elettra Avenue |
| Location    | Waterlooville                               |
| Site number |                                             |
| Date        | 19/10/2021                                  |
| Version     |                                             |
| Status      | (new file)                                  |
| Identifier  |                                             |
| Client      |                                             |
| Jobnumber   | 19235                                       |
| Enumerator  | DTA\arcady                                  |
| Description |                                             |

### Units

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

## Analysis Options

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

## Lane Simulation options

| Criteria type | Stop criteria (%) | Stop criteria time (s) | Stop criteria number of trials | Random seed | Results refresh speed (s) | Individual vehicle animation number of trials | Average animation capture interval (s) | Use quick response | Do flow sampling | Suppress automatic lane creation | Last run random seed | Last run number of trials | Last run time taken (s) |
|---------------|-------------------|------------------------|--------------------------------|-------------|---------------------------|-----------------------------------------------|----------------------------------------|--------------------|------------------|----------------------------------|----------------------|---------------------------|-------------------------|
| Delay         | 1.00              | 100000                 | 100000                         | -1          | 3                         | 1                                             | 60                                     | ✓                  |                  |                                  | 761363891            | 162                       | 27.22                   |

## Demand Set Summary

| ID  | Scenario name             | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|---------------------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D1  | 2021 Base                 | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        |                   |
| D2  | 2021 Base                 | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        |                   |
| D3  | 2021 Base                 | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        |                   |
| D4  | 2026 Base + Com Dev       | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        |                   |
| D5  | 2026 Base + Com Dev       | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        |                   |
| D6  | 2026 Base + Com Dev       | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        |                   |
| D7  | 2026 Base + Com Dev + Dev | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        |                   |
| D8  | 2026 Base + Com Dev + Dev | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        |                   |
| D9  | 2026 Base + Com Dev + Dev | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        |                   |
| D10 | 2021 Base                 | AM-DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |
| D11 | 2021 Base                 | PM-DIRECT        | DIRECT               | 16:30              | 18:30               | 120                      | 15                        | ✓                 |
| D12 | 2026 Base + Com Dev       | AM-DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        |                   |
| D13 | 2026 Base + Com Dev + Dev | AM-DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        |                   |

## Analysis Set Details

| ID | Name                   | Use Lane Simulation | Include in report | Network flow scaling factor (%) | Network capacity scaling factor (%) |
|----|------------------------|---------------------|-------------------|---------------------------------|-------------------------------------|
| A1 | (Default Analysis Set) | ✓                   | ✓                 | 100.000                         | 100.000                             |

# (Default Analysis Set) - 2021 Base, AM-DIRECT

## Data Errors and Warnings

| Severity | Area            | Item                                     | Description                                                                                                      |
|----------|-----------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry        | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Info     | Lane Simulation | A1 [Lane Simulation]                     | This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.   |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 16.04              | C            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 16.04             | C           |

## Arms

### Arms

| Arm | Name                   | Description | No give-way line |
|-----|------------------------|-------------|------------------|
| 1   | Milton road            |             |                  |
| 2   | Hambledon Road (south) |             |                  |
| 3   | Elettra Avenue         |             |                  |
| 4   | Hambledon Road (north) |             |                  |

### Roundabout Geometry

| Arm                        | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Entry only | Exit only |
|----------------------------|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|------------|-----------|
| 1 - Milton road            | 3.40                             | 4.50                | 8.4                             | 20.0                 | 54.0                              | 15.2                               |            |           |
| 2 - Hambledon Road (south) | 7.30                             | 8.05                | 12.7                            | 47.5                 | 54.0                              | 18.0                               |            |           |
| 3 - Elettra Avenue         | 3.65                             | 7.70                | 52.6                            | 18.0                 | 54.0                              | 22.0                               |            |           |
| 4 - Hambledon Road (north) | 6.80                             | 7.90                | 5.0                             | 15.0                 | 54.0                              | 36.0                               |            |           |

### Slope / Intercept / Capacity

#### Arm Intercept Adjustments

| Arm                        | Type   | Reason | Direct intercept adjustment (PCU/hr) |
|----------------------------|--------|--------|--------------------------------------|
| 1 - Milton road            | Direct |        | 0                                    |
| 2 - Hambledon Road (south) | None   |        |                                      |
| 3 - Elettra Avenue         | None   |        |                                      |
| 4 - Hambledon Road (north) | None   |        |                                      |

#### Roundabout Slope and Intercept used in model

| Arm                        | Final slope | Final intercept (PCU/hr) |
|----------------------------|-------------|--------------------------|
| 1 - Milton road            | 0.536       | 1330                     |
| 2 - Hambledon Road (south) | 0.769       | 2571                     |
| 3 - Elettra Avenue         | 0.676       | 2137                     |
| 4 - Hambledon Road (north) | 0.666       | 2172                     |

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

### Arm Capacity Adjustments

| Arm             | Type   | Reason | Direct capacity adjustment (PCU/hr) |
|-----------------|--------|--------|-------------------------------------|
| 1 - Milton road | Direct |        | 0                                   |

### Lane Simulation: Arm options

| Arm                        | Lane capacity source | Traffic considering secondary lanes (%) |
|----------------------------|----------------------|-----------------------------------------|
| 1 - Milton road            | Evenly split         | 10.00                                   |
| 2 - Hambledon Road (south) | Evenly split         | 10.00                                   |
| 3 - Elettra Avenue         | Evenly split         | 50.00                                   |
| 4 - Hambledon Road (north) | Evenly split         | 10.00                                   |

### Lanes

| Arm                        | Side  | Lane level | Lane | Destination arms | Has limited storage | Storage (PCU) | Has bottleneck | Has obstruction | Minimum capacity (PCU/hr) | Maximum capacity (PCU/hr) | Signalised |
|----------------------------|-------|------------|------|------------------|---------------------|---------------|----------------|-----------------|---------------------------|---------------------------|------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       |                     | Infinity      |                |                 | 0                         | 99999                     |            |
|                            | Exit  | 1          | 1    |                  |                     | Infinity      |                |                 |                           |                           |            |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             |                     | Infinity      |                |                 | 0                         | 99999                     |            |
|                            |       |            | 2    | 1, 2, 4          |                     | Infinity      |                |                 | 0                         | 99999                     |            |
|                            | Exit  | 1          | 1    |                  |                     | Infinity      |                |                 |                           |                           |            |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | ✓                   | 3.00          |                |                 | 0                         | 99999                     |            |
|                            |       |            | 2    | 1, 2, 3          | ✓                   | 3.00          |                |                 | 0                         | 99999                     |            |
|                            |       |            | 2    | (1, 2, 3, 4)     |                     | Infinity      |                |                 |                           |                           |            |
|                            | Exit  | 1          | 1    |                  |                     | Infinity      |                |                 |                           |                           |            |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             |                     | Infinity      |                |                 | 0                         | 99999                     |            |
|                            |       |            | 2    | 2, 3, 4          |                     | Infinity      |                |                 | 0                         | 99999                     |            |
|                            | Exit  | 1          | 1    |                  |                     | Infinity      |                |                 |                           |                           |            |

### Entry Lane slope and intercept

| Arm                        | Side  | Lane level | Lane | Final slope | Final intercept (PCU/hr) |
|----------------------------|-------|------------|------|-------------|--------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 0.536       | 1330                     |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 0.384       | 1286                     |
|                            |       |            | 2    | 0.384       | 1286                     |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 0.338       | 1069                     |
|                            |       |            | 2    | 0.338       | 1069                     |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 0.333       | 1086                     |
|                            |       |            | 2    | 0.333       | 1086                     |

### Summary of Entry Lane allowed movements

| Arm                        | Lane Level | Lane | Destination arm |                        |                |                        |
|----------------------------|------------|------|-----------------|------------------------|----------------|------------------------|
|                            |            |      | Milton road     | Hambledon Road (south) | Elettra Avenue | Hambledon Road (north) |
| 1 - Milton road            | 1          | 1    | ✓               | ✓                      | ✓              | ✓                      |
| 2 - Hambledon Road (south) | 1          | 1    |                 |                        | ✓              | ✓                      |
|                            |            | 2    | ✓               | ✓                      |                | ✓                      |
| 3 - Elettra Avenue         | 1          | 1    |                 |                        |                | ✓                      |
|                            |            | 2    | ✓               | ✓                      | ✓              |                        |
|                            | 2          | 1    | ✓               | ✓                      | ✓              | ✓                      |
| 4 - Hambledon Road (north) | 1          | 1    | ✓               | ✓                      |                |                        |
|                            |            | 2    |                 | ✓                      | ✓              | ✓                      |

### Summary of Entry Lane allowed secondary movements

| Arm                        | Lane Level | Lane | Destination arm |                        |                |                        |
|----------------------------|------------|------|-----------------|------------------------|----------------|------------------------|
|                            |            |      | Milton road     | Hambledon Road (south) | Elettra Avenue | Hambledon Road (north) |
| 1 - Milton road            | 1          | 1    |                 |                        |                |                        |
| 2 - Hambledon Road (south) | 1          | 1    |                 |                        |                |                        |
|                            |            | 2    |                 |                        |                |                        |
| 3 - Elettra Avenue         | 1          | 1    | ✓               |                        |                |                        |
|                            |            | 2    |                 |                        |                |                        |
|                            | 2          | 1    |                 |                        |                |                        |
| 4 - Hambledon Road (north) | 1          | 1    |                 |                        |                |                        |
|                            |            | 2    |                 |                        |                |                        |

## Traffic Demand

### Demand Set Details

| ID  | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D10 | 2021 Base     | AM-DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) | O-D data varies over time |
|------------------------------|-------------------------------|--------------------|---------------------------|---------------------------|
| ✓                            | ✓                             | HV Percentages     | 2.00                      | ✓                         |

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|--------------------|
| 1 - Milton road            |            | DIRECT       | ✓            | 100.000            |
| 2 - Hambledon Road (south) |            | DIRECT       | ✓            | 100.000            |
| 3 - Elettra Avenue         |            | DIRECT       | ✓            | 100.000            |
| 4 - Hambledon Road (north) |            | DIRECT       | ✓            | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

07:30 -  
07:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 416                        | 60                 | 80                         |
|      | 2 - Hambledon Road (south) | 212             | 8                          | 212                | 516                        |
|      | 3 - Elettra Avenue         | 60              | 172                        | 0                  | 112                        |
|      | 4 - Hambledon Road (north) | 20              | 716                        | 72                 | 28                         |

### Demand (PCU/hr)

07:45 -  
08:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 452                        | 132                | 44                         |
|      | 2 - Hambledon Road (south) | 312             | 28                         | 248                | 608                        |
|      | 3 - Elettra Avenue         | 64              | 152                        | 0                  | 156                        |
|      | 4 - Hambledon Road (north) | 24              | 696                        | 80                 | 24                         |

### Demand (PCU/hr)

08:00 -  
08:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 464                        | 108                | 104                        |
|      | 2 - Hambledon Road (south) | 320             | 4                          | 288                | 552                        |
|      | 3 - Elettra Avenue         | 148             | 172                        | 0                  | 88                         |
|      | 4 - Hambledon Road (north) | 36              | 748                        | 72                 | 48                         |

### Demand (PCU/hr)

08:15 -  
08:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 400                        | 84                 | 120                        |
|      | 2 - Hambledon Road (south) | 292             | 36                         | 88                 | 612                        |
|      | 3 - Elettra Avenue         | 72              | 260                        | 0                  | 148                        |
|      | 4 - Hambledon Road (north) | 48              | 752                        | 108                | 68                         |

### Demand (PCU/hr)

08:30 -  
08:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 452                        | 100                | 72                         |
|      | 2 - Hambledon Road (south) | 308             | 48                         | 300                | 700                        |
|      | 3 - Elettra Avenue         | 96              | 212                        | 0                  | 144                        |
|      | 4 - Hambledon Road (north) | 40              | 676                        | 116                | 48                         |

### Demand (PCU/hr)

08:45 -  
09:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 416                        | 72                 | 76                         |
|      | 2 - Hambledon Road (south) | 380             | 40                         | 424                | 684                        |
|      | 3 - Elettra Avenue         | 96              | 228                        | 0                  | 160                        |
|      | 4 - Hambledon Road (north) | 44              | 868                        | 108                | 40                         |

### Demand (PCU/hr)

09:00 -  
09:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 356                        | 56                 | 84                         |
|      | 2 - Hambledon Road (south) | 348             | 44                         | 372                | 748                        |
|      | 3 - Elettra Avenue         | 128             | 308                        | 0                  | 136                        |
|      | 4 - Hambledon Road (north) | 44              | 788                        | 16                 | 84                         |

### Demand (PCU/hr)

09:15 -  
09:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 344                        | 88                 | 28                         |
|      | 2 - Hambledon Road (south) | 356             | 48                         | 212                | 628                        |
|      | 3 - Elettra Avenue         | 128             | 300                        | 0                  | 176                        |
|      | 4 - Hambledon Road (north) | 40              | 632                        | 112                | 48                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 10              | 0                          | 1                  | 6                          |
|      | 3 - Elettra Avenue         | 2               | 8                          | 0                  | 3                          |
|      | 4 - Hambledon Road (north) | 3               | 3                          | 3                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 49.94         | 9.8             | E       | 572                     | 1144                          |
| 2 - Hambledon Road (south) | 7.13          | 3.1             | A       | 1245                    | 2491                          |
| 3 - Elettra Avenue         | 13.79         | 2.5             | B       | 463                     | 926                           |
| 4 - Hambledon Road (north) | 8.06          | 2.3             | A       | 910                     | 1819                          |

## Main Results for each time segment

### 07:30 - 07:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 557                   | 139                     | 1008                      | 551                 | 546                         | 294                             | 0.0               | 3.0             | 15.425    | C                             |
| 2 - Hambledon Road (south) | 956                   | 239                     | 240                       | 958                 | 946                         | 1319                            | 0.0               | 1.1             | 4.405     | A                             |
| 3 - Elettra Avenue         | 341                   | 85                      | 849                       | 343                 | 340                         | 349                             | 0.0               | 0.6             | 6.320     | A                             |
| 4 - Hambledon Road (north) | 849                   | 212                     | 452                       | 850                 | 837                         | 740                             | 0.0               | 1.3             | 5.397     | A                             |

### 07:45 - 08:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 619                   | 155                     | 989                       | 618                 | 624                         | 401                             | 3.0               | 3.6             | 21.486    | C                             |
| 2 - Hambledon Road (south) | 1203                  | 301                     | 275                       | 1206                | 1204                        | 1332                            | 1.1               | 1.5             | 5.301     | A                             |
| 3 - Elettra Avenue         | 377                   | 94                      | 1030                      | 377                 | 375                         | 451                             | 0.6               | 0.8             | 6.932     | A                             |
| 4 - Hambledon Road (north) | 828                   | 207                     | 561                       | 829                 | 824                         | 846                             | 1.3               | 1.3             | 5.717     | A                             |

### 08:00 - 08:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 671                   | 168                     | 1035                      | 670                 | 657                         | 505                             | 3.6               | 7.1             | 34.570    | D                             |
| 2 - Hambledon Road (south) | 1153                  | 288                     | 323                       | 1150                | 1155                        | 1382                            | 1.5               | 2.1             | 5.309     | A                             |
| 3 - Elettra Avenue         | 410                   | 102                     | 1016                      | 409                 | 409                         | 457                             | 0.8               | 1.0             | 7.581     | A                             |
| 4 - Hambledon Road (north) | 898                   | 224                     | 643                       | 897                 | 903                         | 782                             | 1.3               | 1.6             | 6.289     | A                             |

### 08:15 - 08:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 595                   | 149                     | 1228                      | 592                 | 596                         | 418                             | 7.1               | 9.8             | 49.935    | E                             |
| 2 - Hambledon Road (south) | 1035                  | 259                     | 378                       | 1033                | 1034                        | 1442                            | 2.1               | 1.6             | 5.072     | A                             |
| 3 - Elettra Avenue         | 474                   | 118                     | 1134                      | 475                 | 472                         | 277                             | 1.0               | 1.2             | 9.562     | A                             |
| 4 - Hambledon Road (north) | 980                   | 245                     | 664                       | 982                 | 975                         | 944                             | 1.6               | 1.8             | 7.052     | A                             |

### 08:30 - 08:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 624                   | 156                     | 1110                      | 627                 | 634                         | 443                             | 9.8               | 7.3             | 47.385    | E                             |
| 2 - Hambledon Road (south) | 1347                  | 337                     | 337                       | 1343                | 1351                        | 1400                            | 1.6               | 2.5             | 6.160     | A                             |
| 3 - Elettra Avenue         | 444                   | 111                     | 1168                      | 446                 | 450                         | 513                             | 1.2               | 1.1             | 8.958     | A                             |
| 4 - Hambledon Road (north) | 894                   | 224                     | 661                       | 893                 | 885                         | 953                             | 1.8               | 1.7             | 6.603     | A                             |

### 08:45 - 09:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 557                   | 139                     | 1284                      | 559                 | 564                         | 515                             | 7.3               | 8.3             | 47.431    | E                             |
| 2 - Hambledon Road (south) | 1522                  | 380                     | 295                       | 1515                | 1521                        | 1549                            | 2.5               | 3.1             | 7.133     | A                             |
| 3 - Elettra Avenue         | 482                   | 120                     | 1209                      | 481                 | 484                         | 601                             | 1.1               | 1.3             | 9.709     | A                             |
| 4 - Hambledon Road (north) | 1056                  | 264                     | 742                       | 1058                | 1059                        | 949                             | 1.7               | 2.3             | 8.061     | A                             |

### 09:00 - 09:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 493                   | 123                     | 1236                      | 494                 | 516                         | 523                             | 8.3               | 4.2             | 34.270    | D                             |
| 2 - Hambledon Road (south) | 1510                  | 377                     | 244                       | 1510                | 1510                        | 1486                            | 3.1               | 2.8             | 6.668     | A                             |
| 3 - Elettra Avenue         | 566                   | 142                     | 1307                      | 564                 | 563                         | 446                             | 1.3               | 2.5             | 13.787    | B                             |
| 4 - Hambledon Road (north) | 937                   | 234                     | 824                       | 935                 | 935                         | 1047                            | 2.3               | 2.0             | 7.576     | A                             |

### 09:15 - 09:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 461                   | 115                     | 1139                      | 462                 | 474                         | 539                             | 4.2               | 1.9             | 18.129    | C                             |
| 2 - Hambledon Road (south) | 1237                  | 309                     | 285                       | 1240                | 1247                        | 1315                            | 2.8               | 1.9             | 5.522     | A                             |
| 3 - Elettra Avenue         | 609                   | 152                     | 1113                      | 611                 | 606                         | 412                             | 2.5               | 2.1             | 12.859    | B                             |
| 4 - Hambledon Road (north) | 835                   | 209                     | 844                       | 834                 | 829                         | 880                             | 2.0               | 1.8             | 7.040     | A                             |

## Lane Results

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

### Lanes: Main Results for each time segment

#### 07:30 - 07:45

| Am                         | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 557                   | 790               | 0.705 | 551                 | 546                         | 0.0               | 3.0             | 15.425    | C                             |
|                            | Exit  | 1          | 1    |                  | 294                   |                   |       | 294                 | 289                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 475                   | 1193              | 0.398 | 475                 | 471                         | 0.0               | 0.6             | 4.342     | A                             |
|                            | Exit  | 1          | 2    | 1, 2, 4          | 481                   | 1193              | 0.403 | 483                 | 475                         | 0.0               | 0.5             | 4.469     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 132                   | 782               | 0.169 | 132                 | 130                         | 0.0               | 0.2             | 5.565     | A                             |
|                            |       | 2          | 2    | 1, 2, 3          | 210                   | 782               | 0.268 | 211                 | 209                         | 0.0               | 0.4             | 6.409     | A                             |
|                            | Exit  | 1          | 1    | (1, 2, 3, 4)     | 341                   |                   |       | 342                 | 342                         | 0.0               | 0.0             | 0.241     | A                             |
|                            |       | 2          | 2    |                  | 349                   |                   |       | 349                 | 345                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 403                   | 936               | 0.430 | 403                 | 396                         | 0.0               | 0.6             | 5.299     | A                             |
|                            | Exit  | 1          | 2    | 2, 3, 4          | 446                   | 936               | 0.477 | 448                 | 441                         | 0.0               | 0.6             | 5.485     | A                             |
|                            | Exit  | 1          | 1    |                  | 740                   |                   |       | 740                 | 734                         | 0.0               | 0.0             | 0.000     | A                             |

#### 07:45 - 08:00

| Am                         | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 619                   | 800               | 0.774 | 618                 | 624                         | 3.0               | 3.6             | 21.486    | C                             |
|                            | Exit  | 1          | 1    |                  | 401                   |                   |       | 401                 | 394                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 577                   | 1180              | 0.489 | 577                 | 578                         | 0.6               | 0.8             | 5.079     | A                             |
|                            | Exit  | 1          | 2    | 1, 2, 4          | 625                   | 1180              | 0.530 | 628                 | 626                         | 0.5               | 0.8             | 5.512     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 171                   | 720               | 0.237 | 172                 | 174                         | 0.2               | 0.3             | 6.367     | A                             |
|                            |       | 2          | 2    | 1, 2, 3          | 206                   | 720               | 0.286 | 206                 | 201                         | 0.4               | 0.5             | 6.953     | A                             |
|                            | Exit  | 1          | 1    | (1, 2, 3, 4)     | 377                   |                   |       | 377                 | 376                         | 0.0               | 0.1             | 0.257     | A                             |
|                            |       | 2          | 2    |                  | 451                   |                   |       | 451                 | 457                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 397                   | 899               | 0.441 | 397                 | 393                         | 0.6               | 0.6             | 5.522     | A                             |
|                            | Exit  | 1          | 2    | 2, 3, 4          | 431                   | 899               | 0.479 | 431                 | 431                         | 0.6               | 0.7             | 5.894     | A                             |
|                            | Exit  | 1          | 1    |                  | 846                   |                   |       | 846                 | 846                         | 0.0               | 0.0             | 0.000     | A                             |

## 08:00 - 08:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 671                   | 775               | 0.865 | 670                 | 657                         | 3.6               | 7.1             | 34.570    | D                             |
|                            | Exit  | 1          | 1    |                  | 505                   |                   |       | 505                 | 501                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 566                   | 1162              | 0.487 | 565                 | 569                         | 0.8               | 0.9             | 5.113     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 587                   | 1162              | 0.506 | 585                 | 586                         | 0.8               | 1.2             | 5.507     | A                             |
|                            | Exit  | 1          | 1    |                  | 1382                  |                   |       | 1382                | 1379                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 132                   | 725               | 0.182 | 132                 | 131                         | 0.3               | 0.2             | 5.810     | A                             |
|                            |       |            | 2    | 1, 2, 3          | 277                   | 725               | 0.383 | 277                 | 278                         | 0.5               | 0.7             | 7.695     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 410                   |                   |       | 410                 | 410                         | 0.1               | 0.1             | 0.503     | A                             |
|                            | Exit  | 1          | 1    |                  | 457                   |                   |       | 457                 | 459                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 430                   | 872               | 0.493 | 431                 | 431                         | 0.6               | 0.7             | 6.147     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 467                   | 872               | 0.536 | 466                 | 472                         | 0.7               | 0.9             | 6.418     | A                             |
|                            | Exit  | 1          | 1    |                  | 782                   |                   |       | 782                 | 785                         | 0.0               | 0.0             | 0.000     | A                             |

## 08:15 - 08:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 595                   | 672               | 0.886 | 592                 | 596                         | 7.1               | 9.8             | 49.935    | E                             |
|                            | Exit  | 1          | 1    |                  | 418                   |                   |       | 418                 | 419                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 442                   | 1140              | 0.387 | 441                 | 444                         | 0.9               | 0.6             | 4.553     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 593                   | 1140              | 0.520 | 592                 | 590                         | 1.2               | 1.1             | 5.471     | A                             |
|                            | Exit  | 1          | 1    |                  | 1442                  |                   |       | 1442                | 1438                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 169                   | 685               | 0.247 | 170                 | 168                         | 0.2               | 0.3             | 6.955     | A                             |
|                            |       |            | 2    | 1, 2, 3          | 304                   | 685               | 0.444 | 305                 | 304                         | 0.7               | 0.8             | 9.148     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 474                   |                   |       | 474                 | 473                         | 0.1               | 0.0             | 1.213     | A                             |
|                            | Exit  | 1          | 1    |                  | 277                   |                   |       | 277                 | 279                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 460                   | 865               | 0.532 | 461                 | 462                         | 0.7               | 0.7             | 6.716     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 521                   | 865               | 0.602 | 521                 | 513                         | 0.9               | 1.1             | 7.353     | A                             |
|                            | Exit  | 1          | 1    |                  | 944                   |                   |       | 944                 | 942                         | 0.0               | 0.0             | 0.000     | A                             |

## 08:30 - 08:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 624                   | 735               | 0.848 | 627                 | 634                         | 9.8               | 7.3             | 47.385    | E                             |
|                            | Exit  | 1          | 1    |                  | 443                   |                   |       | 443                 | 442                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 664                   | 1156              | 0.575 | 662                 | 662                         | 0.6               | 1.2             | 5.992     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 683                   | 1156              | 0.591 | 681                 | 688                         | 1.1               | 1.4             | 6.327     | A                             |
|                            | Exit  | 1          | 1    |                  | 1400                  |                   |       | 1400                | 1395                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 168                   | 674               | 0.249 | 168                 | 171                         | 0.3               | 0.4             | 7.034     | A                             |
|                            |       |            | 2    | 1, 2, 3          | 277                   | 674               | 0.410 | 278                 | 279                         | 0.8               | 0.6             | 8.800     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 444                   |                   |       | 445                 | 449                         | 0.0               | 0.1             | 0.846     | A                             |
|                            | Exit  | 1          | 1    |                  | 513                   |                   |       | 513                 | 512                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 419                   | 866               | 0.484 | 419                 | 413                         | 0.7               | 0.7             | 6.335     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 475                   | 866               | 0.549 | 473                 | 472                         | 1.1               | 1.0             | 6.837     | A                             |
|                            | Exit  | 1          | 1    |                  | 953                   |                   |       | 953                 | 969                         | 0.0               | 0.0             | 0.000     | A                             |

## 08:45 - 09:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 557                   | 642               | 0.867 | 559                 | 564                         | 7.3               | 8.3             | 47.431    | E                             |
|                            | Exit  | 1          | 1    |                  | 515                   |                   |       | 515                 | 520                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 763                   | 1172              | 0.651 | 759                 | 766                         | 1.2               | 1.6             | 7.066     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 759                   | 1172              | 0.647 | 756                 | 755                         | 1.4               | 1.6             | 7.205     | A                             |
|                            | Exit  | 1          | 1    |                  | 1549                  |                   |       | 1549                | 1544                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 186                   | 660               | 0.282 | 186                 | 190                         | 0.4               | 0.3             | 7.540     | A                             |
|                            |       |            | 2    | 1, 2, 3          | 295                   | 660               | 0.447 | 295                 | 295                         | 0.6               | 0.8             | 9.242     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 482                   |                   |       | 482                 | 484                         | 0.1               | 0.2             | 1.151     | A                             |
|                            | Exit  | 1          | 1    |                  | 601                   |                   |       | 601                 | 604                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 509                   | 839               | 0.607 | 511                 | 510                         | 0.7               | 1.0             | 7.810     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 546                   | 839               | 0.651 | 547                 | 549                         | 1.0               | 1.3             | 8.294     | A                             |
|                            | Exit  | 1          | 1    |                  | 949                   |                   |       | 949                 | 962                         | 0.0               | 0.0             | 0.000     | A                             |

## 09:00 - 09:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 493                   | 668               | 0.738 | 494                 | 516                         | 8.3               | 4.2             | 34.270    | D                             |
|                            | Exit  | 1          | 1    |                  | 523                   |                   |       | 523                 | 520                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 750                   | 1192              | 0.629 | 751                 | 755                         | 1.6               | 1.4             | 6.513     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 760                   | 1192              | 0.638 | 759                 | 756                         | 1.6               | 1.5             | 6.829     | A                             |
|                            | Exit  | 1          | 1    |                  | 1486                  |                   |       | 1486                | 1506                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 179                   | 627               | 0.286 | 180                 | 180                         | 0.3               | 0.4             | 8.142     | A                             |
|                            |       |            | 2    | 1, 2, 3          | 387                   | 627               | 0.618 | 384                 | 384                         | 0.8               | 1.4             | 11.367    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 566                   |                   |       | 566                 | 566                         | 0.2               | 0.7             | 3.449     | A                             |
|                            | Exit  | 1          | 1    |                  | 446                   |                   |       | 446                 | 449                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 459                   | 812               | 0.566 | 459                 | 456                         | 1.0               | 1.0             | 7.427     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 478                   | 812               | 0.588 | 477                 | 479                         | 1.3               | 1.1             | 7.718     | A                             |
|                            | Exit  | 1          | 1    |                  | 1047                  |                   |       | 1047                | 1049                        | 0.0               | 0.0             | 0.000     | A                             |

## 09:15 - 09:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 461                   | 720               | 0.640 | 462                 | 474                         | 4.2               | 1.9             | 18.129    | C                             |
|                            | Exit  | 1          | 1    |                  | 539                   |                   |       | 539                 | 531                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 557                   | 1176              | 0.473 | 559                 | 568                         | 1.4               | 0.7             | 5.019     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 680                   | 1176              | 0.578 | 681                 | 679                         | 1.5               | 1.2             | 5.956     | A                             |
|                            | Exit  | 1          | 1    |                  | 1315                  |                   |       | 1315                | 1329                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 223                   | 692               | 0.322 | 224                 | 220                         | 0.4               | 0.5             | 7.676     | A                             |
|                            |       |            | 2    | 1, 2, 3          | 387                   | 692               | 0.560 | 388                 | 385                         | 1.4               | 1.0             | 10.293    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 609                   |                   |       | 611                 | 605                         | 0.7               | 0.6             | 3.589     | A                             |
|                            | Exit  | 1          | 1    |                  | 412                   |                   |       | 412                 | 412                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 395                   | 805               | 0.490 | 394                 | 390                         | 1.0               | 0.9             | 6.605     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 440                   | 805               | 0.546 | 440                 | 439                         | 1.1               | 1.0             | 7.425     | A                             |
|                            | Exit  | 1          | 1    |                  | 880                   |                   |       | 880                 | 885                         | 0.0               | 0.0             | 0.000     | A                             |

## Lane movements: Main Results for each time segment

07:30 - 07:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 415                   | 104                     | 1330                         | 790               | 0.526 | 411                 | 408                         | 0.0               | 2.3             | 15.497    |    |
|                            |       |            |      | 3      | 63                    | 16                      | 1330                         | 792               | 0.080 | 63                  | 59                          | 0.0               | 0.3             | 15.358    |    |
|                            |       |            |      | 4      | 78                    | 20                      | 1330                         | 788               | 0.099 | 77                  | 79                          | 0.0               | 0.4             | 15.114    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 213                   | 53                      | 1286                         | 1193              | 0.179 | 214                 | 213                         | 0.0               | 0.2             | 4.854     |    |
|                            |       |            |      | 4      | 261                   | 65                      | 1286                         | 1194              | 0.219 | 261                 | 257                         | 0.0               | 0.4             | 3.899     |    |
|                            |       |            | 2    | 1      | 216                   | 54                      | 1286                         | 1194              | 0.181 | 217                 | 212                         | 0.0               | 0.3             | 5.135     |    |
|                            |       |            |      | 2      | 9                     | 2                       | 1135                         | 1053              | 0.009 | 9                   | 8                           | 0.0               | 0.0             | 4.857     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 256                   | 64                      | 1286                         | 1193              | 0.215 | 258                 | 255                         | 0.0               | 0.2             | 3.919     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 16                    | 4                       | 1055                         | 772               | 0.020 | 15                  | 16                          | 0.0               | 0.0             | 5.407     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 116                   | 29                      | 1069                         | 780               | 0.149 | 117                 | 114                         | 0.0               | 0.2             | 5.587     |    |
|                            |       |            | 2    | 1      | 38                    | 10                      | 1069                         | 779               | 0.049 | 38                  | 40                          | 0.0               | 0.1             | 5.701     |    |
|                            |       |            |      | 2      | 172                   | 43                      | 1069                         | 782               | 0.220 | 173                 | 169                         | 0.0               | 0.3             | 6.590     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 1    | 1      | 54                    | 13                      | -                            | -                 | -     | 54                  | 57                          | 0.0               | 0.0             | 0.231     |    |
|                            |       |            |      | 2      | 172                   | 43                      | -                            | -                 | -     | 172                 | 170                         | 0.0               | 0.0             | 0.303     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 116                   | 29                      | -                            | -                 | -     | 116                 | 115                         | 0.0               | 0.0             | 0.160     |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 24                    | 6                       | 1073                         | 925               | 0.026 | 24                  | 20                          | 0.0               | 0.0             | 6.396     |    |
|                            |       |            |      | 2      | 379                   | 95                      | 1086                         | 936               | 0.405 | 379                 | 376                         | 0.0               | 0.6             | 5.239     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 346                   | 87                      | 1086                         | 935               | 0.370 | 347                 | 340                         | 0.0               | 0.5             | 5.143     |    |
|                            |       |            |      | 3      | 72                    | 18                      | 1086                         | 935               | 0.077 | 72                  | 72                          | 0.0               | 0.1             | 6.645     |    |
|                            |       |            |      | 4      | 28                    | 7                       | 1079                         | 930               | 0.030 | 28                  | 28                          | 0.0               | 0.0             | 6.615     |    |

07:45 - 08:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 447                   | 112                     | 1330                         | 798               | 0.560 | 446                 | 451                         | 2.3               | 2.6             | 21.400    |    |
|                            |       |            |      | 3      | 129                   | 32                      | 1330                         | 799               | 0.161 | 130                 | 128                         | 0.3               | 0.7             | 21.621    |    |
|                            |       |            |      | 4      | 43                    | 11                      | 1330                         | 802               | 0.054 | 42                  | 45                          | 0.4               | 0.3             | 21.939    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 243                   | 61                      | 1286                         | 1179              | 0.206 | 243                 | 249                         | 0.2               | 0.3             | 5.641     |    |
|                            |       |            |      | 4      | 334                   | 84                      | 1286                         | 1180              | 0.283 | 334                 | 330                         | 0.4               | 0.5             | 4.637     |    |
|                            |       | 2          | 2    | 1      | 308                   | 77                      | 1286                         | 1179              | 0.261 | 310                 | 306                         | 0.3               | 0.4             | 6.386     |    |
|                            |       |            |      | 2      | 29                    | 7                       | 1286                         | 1177              | 0.025 | 29                  | 29                          | 0.0               | 0.1             | 6.096     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 288                   | 72                      | 1286                         | 1180              | 0.244 | 289                 | 291                         | 0.2               | 0.3             | 4.562     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 17                    | 4                       | 1042                         | 706               | 0.024 | 17                  | 17                          | 0.0               | 0.0             | 5.374     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 154                   | 39                      | 1069                         | 719               | 0.214 | 155                 | 157                         | 0.2               | 0.3             | 6.475     |    |
|                            |       |            | 2    | 1      | 47                    | 12                      | 1069                         | 720               | 0.066 | 47                  | 46                          | 0.1               | 0.1             | 6.207     |    |
|                            |       |            |      | 2      | 159                   | 40                      | 1069                         | 719               | 0.221 | 159                 | 156                         | 0.3               | 0.4             | 7.186     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 1    | 1      | 64                    | 16                      | -                            | -                 | -     | 64                  | 63                          | 0.0               | 0.0             | 0.244     |    |
|                            |       |            |      | 2      | 159                   | 40                      | -                            | -                 | -     | 159                 | 156                         | 0.0               | 0.0             | 0.324     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 154                   | 39                      | -                            | -                 | -     | 154                 | 157                         | 0.0               | 0.0             | 0.200     |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 27                    | 7                       | 1086                         | 901               | 0.030 | 27                  | 25                          | 0.0               | 0.0             | 6.488     |    |
|                            |       |            |      | 2      | 370                   | 93                      | 1086                         | 899               | 0.412 | 370                 | 368                         | 0.6               | 0.6             | 5.456     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 327                   | 82                      | 1086                         | 900               | 0.364 | 328                 | 328                         | 0.5               | 0.5             | 5.568     |    |
|                            |       |            |      | 3      | 78                    | 20                      | 1086                         | 899               | 0.087 | 78                  | 80                          | 0.1               | 0.2             | 6.958     |    |
|                            |       |            |      | 4      | 25                    | 6                       | 1086                         | 899               | 0.028 | 25                  | 23                          | 0.0               | 0.0             | 6.814     |    |

08:00 - 08:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 460                   | 115                     | 1330                         | 777               | 0.592 | 462                 | 451                         | 2.6               | 4.7             | 34.416    |    |
|                            |       |            |      | 3      | 105                   | 26                      | 1330                         | 772               | 0.136 | 106                 | 105                         | 0.7               | 1.1             | 34.832    |    |
|                            |       |            |      | 4      | 106                   | 27                      | 1330                         | 771               | 0.138 | 101                 | 100                         | 0.3               | 1.3             | 34.962    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 283                   | 71                      | 1286                         | 1161              | 0.243 | 281                 | 284                         | 0.3               | 0.5             | 5.683     |    |
|                            |       |            |      | 4      | 283                   | 71                      | 1286                         | 1162              | 0.244 | 284                 | 286                         | 0.5               | 0.4             | 4.520     |    |
|                            |       |            | 2    | 1      | 317                   | 79                      | 1286                         | 1162              | 0.273 | 316                 | 318                         | 0.4               | 0.7             | 6.336     |    |
|                            |       |            |      | 2      | 3                     | 0.87                    | 801                          | 725               | 0.005 | 4                   | 4                           | 0.1               | 0.0             | 6.471     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 267                   | 67                      | 1286                         | 1161              | 0.230 | 265                 | 265                         | 0.3               | 0.4             | 4.538     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 46                    | 11                      | 1069                         | 725               | 0.063 | 46                  | 45                          | 0.0               | 0.0             | 5.502     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 86                    | 22                      | 1069                         | 726               | 0.119 | 85                  | 86                          | 0.3               | 0.2             | 5.970     |    |
|                            |       |            | 2    | 1      | 107                   | 27                      | 1069                         | 725               | 0.148 | 107                 | 103                         | 0.1               | 0.3             | 7.298     |    |
|                            |       |            |      | 2      | 170                   | 43                      | 1069                         | 726               | 0.234 | 170                 | 175                         | 0.4               | 0.4             | 7.945     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 1    | 1      | 153                   | 38                      | -                            | -                 | -     | 153                 | 149                         | 0.0               | 0.0             | 0.446     |    |
|                            |       |            |      | 2      | 170                   | 43                      | -                            | -                 | -     | 170                 | 175                         | 0.0               | 0.0             | 0.665     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 86                    | 22                      | -                            | -                 | -     | 86                  | 86                          | 0.0               | 0.0             | 0.290     |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 36                    | 9                       | 1086                         | 870               | 0.041 | 36                  | 35                          | 0.0               | 0.1             | 7.289     |    |
|                            |       |            |      | 2      | 395                   | 99                      | 1086                         | 872               | 0.453 | 396                 | 396                         | 0.6               | 0.6             | 6.046     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 352                   | 88                      | 1086                         | 872               | 0.403 | 351                 | 353                         | 0.5               | 0.6             | 6.045     |    |
|                            |       |            |      | 3      | 69                    | 17                      | 1086                         | 870               | 0.080 | 69                  | 70                          | 0.2               | 0.1             | 7.578     |    |
|                            |       |            |      | 4      | 47                    | 12                      | 1086                         | 871               | 0.053 | 46                  | 48                          | 0.0               | 0.1             | 7.431     |    |

08:15 - 08:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 395                   | 99                      | 1330                         | 672               | 0.587 | 391                 | 393                         | 4.7               | 6.5             | 49.958    |    |
|                            |       |            |      | 3      | 83                    | 21                      | 1330                         | 672               | 0.123 | 82                  | 84                          | 1.1               | 1.5             | 49.991    |    |
|                            |       |            |      | 4      | 118                   | 30                      | 1330                         | 677               | 0.174 | 119                 | 120                         | 1.3               | 1.9             | 49.821    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 88                    | 22                      | 1286                         | 1141              | 0.077 | 88                  | 91                          | 0.5               | 0.1             | 4.900     |    |
|                            |       |            |      | 4      | 354                   | 88                      | 1286                         | 1140              | 0.310 | 354                 | 354                         | 0.4               | 0.4             | 4.461     |    |
|                            |       |            | 2    | 1      | 301                   | 75                      | 1286                         | 1140              | 0.264 | 300                 | 297                         | 0.7               | 0.6             | 6.358     |    |
|                            |       |            |      | 2      | 38                    | 9                       | 1286                         | 1142              | 0.033 | 38                  | 37                          | 0.0               | 0.1             | 5.938     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 254                   | 64                      | 1286                         | 1140              | 0.223 | 254                 | 256                         | 0.4               | 0.4             | 4.404     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 22                    | 5                       | 1069                         | 690               | 0.032 | 22                  | 23                          | 0.0               | 0.0             | 6.533     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 148                   | 37                      | 1069                         | 685               | 0.216 | 148                 | 146                         | 0.2               | 0.3             | 7.021     |    |
|                            |       |            | 2    | 1      | 50                    | 13                      | 1069                         | 687               | 0.073 | 50                  | 51                          | 0.3               | 0.1             | 8.068     |    |
|                            |       |            |      | 2      | 254                   | 64                      | 1069                         | 685               | 0.371 | 255                 | 254                         | 0.4               | 0.7             | 9.374     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 72                    | 18                      | -                            | -                 | -     | 72                  | 73                          | 0.0               | 0.0             | 1.041     |    |
|                            |       |            |      | 2      | 255                   | 64                      | -                            | -                 | -     | 254                 | 255                         | 0.0               | 0.0             | 1.389     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 147                   | 37                      | -                            | -                 | -     | 148                 | 146                         | 0.0               | 0.0             | 1.009     |    |
|                            |       |            | 2    | 1      | 46                    | 12                      | 1086                         | 867               | 0.053 | 47                  | 48                          | 0.1               | 0.0             | 8.001     |    |
|                            |       |            |      | 2      | 414                   | 103                     | 1086                         | 865               | 0.478 | 414                 | 414                         | 0.6               | 0.6             | 6.569     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 344                   | 86                      | 1086                         | 865               | 0.397 | 344                 | 341                         | 0.6               | 0.6             | 6.655     |    |
|                            |       |            |      | 3      | 107                   | 27                      | 1086                         | 865               | 0.123 | 107                 | 104                         | 0.1               | 0.3             | 8.799     |    |
|                            |       |            |      | 4      | 70                    | 18                      | 1086                         | 866               | 0.081 | 70                  | 68                          | 0.1               | 0.2             | 8.599     |    |

08:30 - 08:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 453                   | 113                     | 1330                         | 736               | 0.616 | 455                 | 454                         | 6.5               | 5.3             | 47.262    |    |
|                            |       |            |      | 3      | 98                    | 25                      | 1330                         | 737               | 0.134 | 100                 | 102                         | 1.5               | 1.1             | 47.854    |    |
|                            |       |            |      | 4      | 72                    | 18                      | 1330                         | 736               | 0.097 | 72                  | 78                          | 1.9               | 0.9             | 47.474    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 298                   | 75                      | 1286                         | 1156              | 0.258 | 296                 | 294                         | 0.1               | 0.7             | 6.616     |    |
|                            |       |            |      | 4      | 366                   | 91                      | 1286                         | 1156              | 0.316 | 367                 | 368                         | 0.4               | 0.5             | 5.467     |    |
|                            |       |            | 2    | 1      | 305                   | 76                      | 1286                         | 1156              | 0.264 | 304                 | 306                         | 0.6               | 0.7             | 7.405     |    |
|                            |       |            |      | 2      | 51                    | 13                      | 1286                         | 1154              | 0.044 | 51                  | 49                          | 0.1               | 0.1             | 7.086     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 328                   | 82                      | 1286                         | 1155              | 0.284 | 326                 | 333                         | 0.4               | 0.6             | 5.263     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 29                    | 7                       | 1069                         | 675               | 0.042 | 28                  | 28                          | 0.0               | 0.1             | 6.072     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 140                   | 35                      | 1069                         | 675               | 0.207 | 140                 | 142                         | 0.3               | 0.3             | 7.227     |    |
|                            |       |            | 2    | 1      | 68                    | 17                      | 1069                         | 674               | 0.101 | 69                  | 67                          | 0.1               | 0.2             | 7.942     |    |
|                            |       |            |      | 2      | 208                   | 52                      | 1069                         | 674               | 0.309 | 209                 | 212                         | 0.7               | 0.5             | 9.092     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 1    | 1      | 97                    | 24                      | -                            | -                 | -     | 97                  | 96                          | 0.0               | 0.0             | 0.696     |    |
|                            |       |            |      | 2      | 208                   | 52                      | -                            | -                 | -     | 208                 | 211                         | 0.0               | 0.0             | 1.096     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 139                   | 35                      | -                            | -                 | -     | 140                 | 143                         | 0.0               | 0.0             | 0.596     |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 43                    | 11                      | 1086                         | 868               | 0.050 | 43                  | 40                          | 0.0               | 0.1             | 7.370     |    |
|                            |       |            |      | 2      | 376                   | 94                      | 1086                         | 866               | 0.434 | 377                 | 373                         | 0.6               | 0.6             | 6.223     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 308                   | 77                      | 1086                         | 866               | 0.356 | 308                 | 307                         | 0.6               | 0.5             | 6.188     |    |
|                            |       |            |      | 3      | 118                   | 29                      | 1086                         | 867               | 0.136 | 117                 | 116                         | 0.3               | 0.4             | 8.135     |    |
|                            |       |            |      | 4      | 49                    | 12                      | 1086                         | 865               | 0.057 | 48                  | 49                          | 0.2               | 0.1             | 7.826     |    |

08:45 - 09:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 415                   | 104                     | 1330                         | 642               | 0.646 | 415                 | 417                         | 5.3               | 6.3             | 47.476    |    |
|                            |       |            |      | 3      | 70                    | 17                      | 1330                         | 648               | 0.108 | 72                  | 72                          | 1.1               | 0.9             | 48.225    |    |
|                            |       |            |      | 4      | 71                    | 18                      | 1330                         | 644               | 0.111 | 72                  | 76                          | 0.9               | 1.1             | 46.441    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 420                   | 105                     | 1286                         | 1173              | 0.358 | 417                 | 421                         | 0.7               | 1.0             | 7.762     |    |
|                            |       |            |      | 4      | 343                   | 86                      | 1286                         | 1172              | 0.293 | 342                 | 344                         | 0.5               | 0.6             | 6.172     |    |
|                            |       | 2          | 2    | 1      | 381                   | 95                      | 1286                         | 1172              | 0.325 | 380                 | 378                         | 0.7               | 0.9             | 8.244     |    |
|                            |       |            |      | 2      | 39                    | 10                      | 1286                         | 1171              | 0.034 | 39                  | 38                          | 0.1               | 0.1             | 7.990     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 338                   | 84                      | 1286                         | 1172              | 0.288 | 338                 | 339                         | 0.6               | 0.5             | 5.998     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 28                    | 7                       | 1069                         | 661               | 0.043 | 28                  | 28                          | 0.1               | 0.0             | 6.703     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 158                   | 39                      | 1069                         | 660               | 0.239 | 158                 | 161                         | 0.3               | 0.3             | 7.685     |    |
|                            |       |            | 2    | 1      | 68                    | 17                      | 1069                         | 661               | 0.103 | 68                  | 70                          | 0.2               | 0.2             | 8.320     |    |
|                            |       |            |      | 2      | 227                   | 57                      | 1069                         | 661               | 0.344 | 227                 | 225                         | 0.5               | 0.6             | 9.543     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 1    | 1      | 96                    | 24                      | -                            | -                 | -     | 96                  | 98                          | 0.0               | 0.0             | 1.082     |    |
|                            |       |            |      | 2      | 228                   | 57                      | -                            | -                 | -     | 227                 | 225                         | 0.0               | 0.1             | 1.390     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 158                   | 39                      | -                            | -                 | -     | 158                 | 161                         | 0.0               | 0.0             | 0.876     |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 40                    | 10                      | 1086                         | 839               | 0.048 | 39                  | 43                          | 0.1               | 0.1             | 9.418     |    |
|                            |       |            |      | 2      | 469                   | 117                     | 1086                         | 840               | 0.559 | 472                 | 467                         | 0.6               | 0.9             | 7.662     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 395                   | 99                      | 1086                         | 841               | 0.471 | 396                 | 397                         | 0.5               | 0.8             | 7.707     |    |
|                            |       |            |      | 3      | 112                   | 28                      | 1086                         | 840               | 0.134 | 112                 | 111                         | 0.4               | 0.3             | 9.814     |    |
|                            |       |            |      | 4      | 38                    | 10                      | 1086                         | 841               | 0.046 | 39                  | 41                          | 0.1               | 0.1             | 9.860     |    |

09:00 - 09:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 352                   | 88                      | 1330                         | 668               | 0.526 | 353                 | 371                         | 6.3               | 3.0             | 34.020    |    |
|                            |       |            |      | 3      | 58                    | 14                      | 1330                         | 670               | 0.086 | 59                  | 61                          | 0.9               | 0.4             | 34.900    |    |
|                            |       |            |      | 4      | 83                    | 21                      | 1330                         | 668               | 0.124 | 82                  | 84                          | 1.1               | 0.8             | 34.878    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 371                   | 93                      | 1286                         | 1192              | 0.311 | 371                 | 372                         | 1.0               | 0.7             | 7.181     |    |
|                            |       |            |      | 4      | 379                   | 95                      | 1286                         | 1191              | 0.319 | 379                 | 383                         | 0.6               | 0.7             | 5.834     |    |
|                            |       | 2          | 2    | 1      | 349                   | 87                      | 1286                         | 1192              | 0.293 | 349                 | 349                         | 0.9               | 0.8             | 7.955     |    |
|                            |       |            |      | 2      | 44                    | 11                      | 1286                         | 1190              | 0.037 | 45                  | 44                          | 0.1               | 0.1             | 7.448     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 366                   | 92                      | 1286                         | 1192              | 0.307 | 366                 | 363                         | 0.5               | 0.6             | 5.712     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 47                    | 12                      | 1069                         | 625               | 0.075 | 47                  | 45                          | 0.0               | 0.1             | 7.513     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 132                   | 33                      | 1069                         | 628               | 0.211 | 133                 | 135                         | 0.3               | 0.3             | 8.351     |    |
|                            |       |            | 2    | 1      | 84                    | 21                      | 1069                         | 628               | 0.135 | 84                  | 83                          | 0.2               | 0.3             | 10.151    |    |
|                            |       |            |      | 2      | 303                   | 76                      | 1069                         | 627               | 0.483 | 300                 | 301                         | 0.6               | 1.1             | 11.723    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 1    | 1      | 131                   | 33                      | -                            | -                 | -     | 131                 | 129                         | 0.0               | 0.1             | 3.126     |    |
|                            |       |            |      | 2      | 303                   | 76                      | -                            | -                 | -     | 303                 | 303                         | 0.1               | 0.5             | 3.895     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 132                   | 33                      | -                            | -                 | -     | 132                 | 135                         | 0.0               | 0.1             | 2.808     |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 44                    | 11                      | 1086                         | 814               | 0.055 | 44                  | 44                          | 0.1               | 0.2             | 9.076     |    |
|                            |       |            |      | 2      | 415                   | 104                     | 1086                         | 812               | 0.511 | 415                 | 413                         | 0.9               | 0.8             | 7.254     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 375                   | 94                      | 1086                         | 812               | 0.462 | 374                 | 378                         | 0.8               | 0.9             | 7.329     |    |
|                            |       |            |      | 3      | 15                    | 4                       | 1059                         | 791               | 0.019 | 16                  | 16                          | 0.3               | 0.0             | 8.718     |    |
|                            |       |            |      | 4      | 87                    | 22                      | 1086                         | 812               | 0.107 | 87                  | 84                          | 0.1               | 0.2             | 9.234     |    |

09:15 - 09:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 341                   | 85                      | 1330                         | 722               | 0.473 | 342                 | 354                         | 3.0               | 1.4             | 18.297    |    |
|                            |       |            |      | 3      | 91                    | 23                      | 1330                         | 722               | 0.126 | 91                  | 89                          | 0.4               | 0.4             | 17.685    |    |
|                            |       |            |      | 4      | 29                    | 7                       | 1330                         | 728               | 0.040 | 29                  | 31                          | 0.8               | 0.1             | 17.526    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 205                   | 51                      | 1286                         | 1177              | 0.175 | 206                 | 211                         | 0.7               | 0.3             | 5.547     |    |
|                            |       |            |      | 4      | 351                   | 88                      | 1286                         | 1176              | 0.299 | 353                 | 357                         | 0.7               | 0.5             | 4.695     |    |
|                            |       | 2          | 2    | 1      | 364                   | 91                      | 1286                         | 1176              | 0.310 | 365                 | 361                         | 0.8               | 0.8             | 6.913     |    |
|                            |       |            |      | 2      | 49                    | 12                      | 1286                         | 1177              | 0.042 | 49                  | 48                          | 0.1               | 0.1             | 6.692     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 266                   | 67                      | 1286                         | 1176              | 0.226 | 267                 | 270                         | 0.6               | 0.3             | 4.594     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 43                    | 11                      | 1069                         | 694               | 0.061 | 43                  | 41                          | 0.1               | 0.1             | 6.839     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 181                   | 45                      | 1069                         | 693               | 0.260 | 181                 | 179                         | 0.3               | 0.4             | 7.868     |    |
|                            |       | 2          | 2    | 1      | 91                    | 23                      | 1069                         | 694               | 0.132 | 91                  | 89                          | 0.3               | 0.2             | 9.102     |    |
|                            |       |            |      | 2      | 296                   | 74                      | 1069                         | 692               | 0.428 | 297                 | 297                         | 1.1               | 0.8             | 10.670    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 134                   | 33                      | -                            | -                 | -     | 134                 | 130                         | 0.1               | 0.1             | 3.064     |    |
|                            |       |            |      | 2      | 295                   | 74                      | -                            | -                 | -     | 296                 | 295                         | 0.5               | 0.4             | 4.121     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 180                   | 45                      | -                            | -                 | -     | 181                 | 180                         | 0.1               | 0.1             | 3.143     |    |
|                            |       | 2          | 2    | 1      | 41                    | 10                      | 1086                         | 809               | 0.051 | 40                  | 40                          | 0.2               | 0.1             | 8.057     |    |
|                            |       |            |      | 2      | 354                   | 88                      | 1086                         | 806               | 0.439 | 354                 | 350                         | 0.8               | 0.8             | 6.440     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |

# (Default Analysis Set) - 2021 Base, PM-DIRECT

## Data Errors and Warnings

| Severity | Area            | Item                                     | Description                                                                                                      |
|----------|-----------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry        | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Info     | Lane Simulation | A1 [Lane Simulation]                     | This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.   |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 22.93              | C            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 22.93             | C           |

## Traffic Demand

### Demand Set Details

| ID  | Scenario name | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|---------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D11 | 2021 Base     | PM-DIRECT        | DIRECT               | 16:30              | 18:30               | 120                      | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) | O-D data varies over time |
|------------------------------|-------------------------------|--------------------|---------------------------|---------------------------|
| ✓                            | ✓                             | HV Percentages     | 2.00                      | ✓                         |

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|--------------------|
| 1 - Milton road            |            | DIRECT       | ✓            | 100.000            |
| 2 - Hambledon Road (south) |            | DIRECT       | ✓            | 100.000            |
| 3 - Elettra Avenue         |            | DIRECT       | ✓            | 100.000            |
| 4 - Hambledon Road (north) |            | DIRECT       | ✓            | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

16:30 -  
16:45

|      |                            | To              |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 340                        | 72                 | 76                         |
|      | 2 - Hambledon Road (south) | 480             | 76                         | 208                | 664                        |
|      | 3 - Elettra Avenue         | 184             | 296                        | 0                  | 164                        |
|      | 4 - Hambledon Road (north) | 24              | 656                        | 72                 | 40                         |

**Demand (PCU/hr)**

16:45 -  
17:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 248                        | 80                 | 36                         |
|      | 2 - Hambledon Road (south) | 604             | 68                         | 228                | 672                        |
|      | 3 - Elettra Avenue         | 168             | 344                        | 0                  | 144                        |
|      | 4 - Hambledon Road (north) | 52              | 488                        | 104                | 12                         |

**Demand (PCU/hr)**

17:00 -  
17:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 288                        | 80                 | 64                         |
|      | 2 - Hambledon Road (south) | 500             | 140                        | 260                | 672                        |
|      | 3 - Elettra Avenue         | 224             | 456                        | 0                  | 200                        |
|      | 4 - Hambledon Road (north) | 48              | 620                        | 80                 | 32                         |

**Demand (PCU/hr)**

17:15 -  
17:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 316                        | 124                | 52                         |
|      | 2 - Hambledon Road (south) | 464             | 96                         | 220                | 724                        |
|      | 3 - Elettra Avenue         | 212             | 340                        | 0                  | 172                        |
|      | 4 - Hambledon Road (north) | 24              | 560                        | 92                 | 48                         |

**Demand (PCU/hr)**

17:30 -  
17:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 360                        | 68                 | 28                         |
|      | 2 - Hambledon Road (south) | 516             | 92                         | 204                | 688                        |
|      | 3 - Elettra Avenue         | 192             | 336                        | 0                  | 144                        |
|      | 4 - Hambledon Road (north) | 44              | 636                        | 108                | 44                         |

**Demand (PCU/hr)**

17:45 -  
18:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 288                        | 96                 | 68                         |
|      | 2 - Hambledon Road (south) | 436             | 56                         | 196                | 604                        |
|      | 3 - Elettra Avenue         | 148             | 264                        | 0                  | 108                        |
|      | 4 - Hambledon Road (north) | 40              | 428                        | 108                | 16                         |

**Demand (PCU/hr)**

18:00 -  
18:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 304                        | 88                 | 44                         |
|      | 2 - Hambledon Road (south) | 544             | 40                         | 124                | 588                        |
|      | 3 - Elettra Avenue         | 156             | 260                        | 0                  | 120                        |
|      | 4 - Hambledon Road (north) | 56              | 584                        | 88                 | 16                         |

**Demand (PCU/hr)**

18:15 -  
18:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 408                        | 120                | 60                         |
|      | 2 - Hambledon Road (south) | 396             | 52                         | 248                | 596                        |
|      | 3 - Elettra Avenue         | 172             | 396                        | 0                  | 128                        |
|      | 4 - Hambledon Road (north) | 40              | 572                        | 84                 | 16                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 10              | 0                          | 1                  | 6                          |
|      | 3 - Elettra Avenue         | 2               | 8                          | 0                  | 3                          |
|      | 4 - Hambledon Road (north) | 3               | 3                          | 3                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 22.81         | 4.3             | C       | 463                     | 925                           |
| 2 - Hambledon Road (south) | 7.79          | 3.5             | A       | 1432                    | 2863                          |
| 3 - Elettra Avenue         | 70.17         | 23.5            | F       | 667                     | 1334                          |
| 4 - Hambledon Road (north) | 9.57          | 2.2             | A       | 730                     | 1460                          |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 485                   | 121                     | 1139                      | 486                 | 480                         | 686                             | 0.0               | 2.2             | 15.963    | C                             |
| 2 - Hambledon Road (south) | 1417                  | 354                     | 259                       | 1415                | 1413                        | 1366                            | 0.0               | 2.8             | 6.530     | A                             |
| 3 - Elettra Avenue         | 638                   | 160                     | 1322                      | 640                 | 631                         | 351                             | 0.0               | 3.0             | 16.280    | C                             |
| 4 - Hambledon Road (north) | 797                   | 199                     | 1026                      | 799                 | 792                         | 936                             | 0.0               | 1.8             | 7.673     | A                             |

#### 16:45 - 17:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 356                   | 89                      | 1019                      | 355                 | 365                         | 830                             | 2.2               | 0.9             | 9.497     | A                             |
| 2 - Hambledon Road (south) | 1561                  | 390                     | 227                       | 1561                | 1569                        | 1146                            | 2.8               | 3.4             | 7.792     | A                             |
| 3 - Elettra Avenue         | 660                   | 165                     | 1383                      | 663                 | 651                         | 405                             | 3.0               | 4.3             | 23.522    | C                             |
| 4 - Hambledon Road (north) | 657                   | 164                     | 1192                      | 657                 | 657                         | 854                             | 1.8               | 1.4             | 7.707     | A                             |

#### 17:00 - 17:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 426                   | 106                     | 1288                      | 430                 | 428                         | 757                             | 0.9               | 1.9             | 16.127    | C                             |
| 2 - Hambledon Road (south) | 1579                  | 395                     | 257                       | 1578                | 1572                        | 1462                            | 3.4               | 3.5             | 7.615     | A                             |
| 3 - Elettra Avenue         | 876                   | 219                     | 1416                      | 817                 | 801                         | 419                             | 4.3               | 23.5            | 70.170    | F                             |
| 4 - Hambledon Road (north) | 778                   | 194                     | 1268                      | 777                 | 777                         | 966                             | 1.4               | 2.2             | 9.571     | A                             |

### 17:15 - 17:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 498                   | 124                     | 1147                      | 502                 | 491                         | 718                             | 1.9               | 2.3             | 19.980    | C                             |
| 2 - Hambledon Road (south) | 1503                  | 376                     | 314                       | 1503                | 1505                        | 1335                            | 3.5               | 3.0             | 7.375     | A                             |
| 3 - Elettra Avenue         | 734                   | 184                     | 1382                      | 760                 | 783                         | 435                             | 23.5              | 9.6             | 66.291    | F                             |
| 4 - Hambledon Road (north) | 719                   | 180                     | 1144                      | 721                 | 729                         | 998                             | 2.2               | 1.6             | 8.553     | A                             |

### 17:30 - 17:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 463                   | 116                     | 1222                      | 462                 | 458                         | 755                             | 2.3               | 2.5             | 18.537    | C                             |
| 2 - Hambledon Road (south) | 1499                  | 375                     | 246                       | 1497                | 1501                        | 1438                            | 3.0               | 3.2             | 7.238     | A                             |
| 3 - Elettra Avenue         | 674                   | 169                     | 1372                      | 677                 | 689                         | 371                             | 9.6               | 5.4             | 31.088    | D                             |
| 4 - Hambledon Road (north) | 838                   | 209                     | 1141                      | 836                 | 834                         | 908                             | 1.6               | 2.2             | 9.277     | A                             |

### 17:45 - 18:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 450                   | 113                     | 873                       | 449                 | 459                         | 632                             | 2.5               | 1.2             | 11.443    | B                             |
| 2 - Hambledon Road (south) | 1294                  | 324                     | 290                       | 1294                | 1297                        | 1032                            | 3.2               | 2.1             | 6.034     | A                             |
| 3 - Elettra Avenue         | 515                   | 129                     | 1185                      | 516                 | 535                         | 399                             | 5.4               | 1.5             | 13.377    | B                             |
| 4 - Hambledon Road (north) | 595                   | 149                     | 910                       | 595                 | 599                         | 791                             | 2.2               | 1.1             | 6.515     | A                             |

### 18:00 - 18:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 438                   | 109                     | 984                       | 438                 | 435                         | 758                             | 1.2               | 1.3             | 10.283    | B                             |
| 2 - Hambledon Road (south) | 1298                  | 325                     | 241                       | 1299                | 1296                        | 1181                            | 2.1               | 2.5             | 6.351     | A                             |
| 3 - Elettra Avenue         | 536                   | 134                     | 1236                      | 535                 | 537                         | 304                             | 1.5               | 1.8             | 11.976    | B                             |
| 4 - Hambledon Road (north) | 744                   | 186                     | 1000                      | 742                 | 742                         | 770                             | 1.1               | 1.6             | 7.375     | A                             |

### 18:15 - 18:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 586                   | 147                     | 1128                      | 587                 | 574                         | 611                             | 1.3               | 4.3             | 22.809    | C                             |
| 2 - Hambledon Road (south) | 1303                  | 326                     | 275                       | 1307                | 1294                        | 1440                            | 2.5               | 2.1             | 5.806     | A                             |
| 3 - Elettra Avenue         | 701                   | 175                     | 1135                      | 697                 | 683                         | 447                             | 1.8               | 4.1             | 17.783    | C                             |
| 4 - Hambledon Road (north) | 714                   | 179                     | 1027                      | 712                 | 711                         | 806                             | 1.6               | 1.6             | 7.096     | A                             |

## Lane Results

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

### Lanes: Main Results for each time segment

#### 16:30 - 16:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 485                   | 720               | 0.674 | 486                 | 480                         | 0.0               | 2.2             | 15.963    | C                             |
|                            | Exit  | 1          | 1    |                  | 686                   |                   |       | 686                 | 680                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 619                   | 1186              | 0.522 | 619                 | 619                         | 0.0               | 1.0             | 5.518     | A                             |
|                            | Exit  | 1          | 1    | 1, 2, 4          | 797                   | 1186              | 0.672 | 796                 | 794                         | 0.0               | 1.8             | 7.344     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 226                   | 622               | 0.364 | 228                 | 224                         | 0.0               | 0.5             | 8.784     | A                             |
|                            |       |            | 2    | 1, 2, 3          | 413                   | 622               | 0.664 | 412                 | 407                         | 0.0               | 1.4             | 11.874    | B                             |
|                            | Exit  | 1          | 1    | (1, 2, 3, 4)     | 638                   |                   |       | 639                 | 639                         | 0.0               | 1.0             | 5.497     | A                             |
|                            |       |            | 1    |                  | 351                   |                   |       | 351                 | 351                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 376                   | 744               | 0.505 | 377                 | 375                         | 0.0               | 0.8             | 7.554     | A                             |
|                            | Exit  | 1          | 1    | 2, 3, 4          | 420                   | 744               | 0.565 | 421                 | 417                         | 0.0               | 1.0             | 7.780     | A                             |
|                            | Exit  | 1          | 1    |                  | 936                   |                   |       | 936                 | 932                         | 0.0               | 0.0             | 0.000     | A                             |

#### 16:45 - 17:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 356                   | 784               | 0.454 | 355                 | 365                         | 2.2               | 0.9             | 9.497     | A                             |
|                            | Exit  | 1          | 1    |                  | 830                   |                   |       | 830                 | 822                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 677                   | 1198              | 0.565 | 677                 | 679                         | 1.0               | 1.2             | 6.128     | A                             |
|                            | Exit  | 1          | 1    | 1, 2, 4          | 884                   | 1198              | 0.738 | 885                 | 890                         | 1.8               | 2.2             | 9.106     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 209                   | 601               | 0.347 | 208                 | 203                         | 0.5               | 0.6             | 9.234     | A                             |
|                            |       |            | 2    | 1, 2, 3          | 455                   | 601               | 0.757 | 455                 | 447                         | 1.4               | 1.8             | 13.751    | B                             |
|                            | Exit  | 1          | 1    | (1, 2, 3, 4)     | 660                   |                   |       | 664                 | 652                         | 1.0               | 1.9             | 11.188    | B                             |
|                            |       |            | 1    |                  | 405                   |                   |       | 405                 | 409                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 310                   | 689               | 0.450 | 310                 | 312                         | 0.8               | 0.7             | 7.512     | A                             |
|                            | Exit  | 1          | 1    | 2, 3, 4          | 346                   | 689               | 0.503 | 348                 | 344                         | 1.0               | 0.7             | 7.884     | A                             |
|                            | Exit  | 1          | 1    |                  | 854                   |                   |       | 854                 | 860                         | 0.0               | 0.0             | 0.000     | A                             |

#### 17:00 - 17:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 426                   | 640               | 0.666 | 430                 | 428                         | 0.9               | 1.9             | 16.127    | C                             |
|                            | Exit  | 1          | 1    |                  | 757                   |                   |       | 757                 | 758                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 703                   | 1187              | 0.593 | 702                 | 695                         | 1.2               | 1.3             | 6.190     | A                             |
|                            | Exit  | 1          | 1    | 1, 2, 4          | 875                   | 1187              | 0.738 | 876                 | 877                         | 2.2               | 2.2             | 8.780     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 270                   | 590               | 0.458 | 270                 | 262                         | 0.6               | 0.9             | 11.055    | B                             |
|                            |       |            | 2    | 1, 2, 3          | 548                   | 590               | 0.929 | 548                 | 539                         | 1.8               | 2.7             | 16.585    | C                             |
|                            | Exit  | 1          | 1    | (1, 2, 3, 4)     | 876                   |                   |       | 818                 | 806                         | 1.9               | 19.9            | 55.354    | F                             |
|                            |       |            | 1    |                  | 419                   |                   |       | 419                 | 416                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 376                   | 664               | 0.566 | 375                 | 374                         | 0.7               | 1.0             | 9.392     | A                             |
|                            | Exit  | 1          | 1    | 2, 3, 4          | 402                   | 664               | 0.606 | 402                 | 403                         | 0.7               | 1.2             | 9.737     | A                             |
|                            | Exit  | 1          | 1    |                  | 966                   |                   |       | 966                 | 954                         | 0.0               | 0.0             | 0.000     | A                             |

## 17:15 - 17:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 498                   | 716               | 0.695 | 502                 | 491                         | 1.9               | 2.3             | 19.980    | C                             |
|                            | Exit  | 1          | 1    |                  | 718                   |                   |       | 718                 | 717                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 669                   | 1165              | 0.575 | 670                 | 674                         | 1.3               | 1.2             | 6.365     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 833                   | 1165              | 0.715 | 833                 | 831                         | 2.2               | 1.8             | 8.217     | A                             |
|                            | Exit  | 1          | 1    |                  | 1335                  |                   |       | 1335                | 1350                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 266                   | 602               | 0.442 | 266                 | 270                         | 0.9               | 0.8             | 10.947    | B                             |
|                            |       |            | 2    | 1, 2, 3          | 495                   | 602               | 0.822 | 495                 | 513                         | 2.7               | 2.1             | 15.723    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 734                   |                   |       | 760                 | 780                         | 19.9              | 6.7             | 52.395    | F                             |
|                            | Exit  | 1          | 1    |                  | 435                   |                   |       | 435                 | 435                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 332                   | 705               | 0.470 | 332                 | 338                         | 1.0               | 0.7             | 8.136     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 388                   | 705               | 0.550 | 388                 | 391                         | 1.2               | 0.9             | 8.912     | A                             |
|                            | Exit  | 1          | 1    |                  | 998                   |                   |       | 998                 | 1005                        | 0.0               | 0.0             | 0.000     | A                             |

## 17:30 - 17:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 463                   | 675               | 0.685 | 462                 | 458                         | 2.3               | 2.5             | 18.537    | C                             |
|                            | Exit  | 1          | 1    |                  | 755                   |                   |       | 755                 | 753                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 651                   | 1191              | 0.547 | 649                 | 653                         | 1.2               | 1.2             | 5.916     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 848                   | 1191              | 0.712 | 848                 | 848                         | 1.8               | 2.0             | 8.288     | A                             |
|                            | Exit  | 1          | 1    |                  | 1438                  |                   |       | 1438                | 1434                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 217                   | 605               | 0.359 | 219                 | 225                         | 0.8               | 0.5             | 9.610     | A                             |
|                            |       |            | 2    | 1, 2, 3          | 458                   | 605               | 0.757 | 459                 | 465                         | 2.1               | 1.9             | 13.965    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 674                   |                   |       | 675                 | 687                         | 6.7               | 3.1             | 18.665    | C                             |
|                            | Exit  | 1          | 1    |                  | 371                   |                   |       | 371                 | 379                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 395                   | 706               | 0.560 | 394                 | 394                         | 0.7               | 1.1             | 8.888     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 442                   | 706               | 0.626 | 442                 | 439                         | 0.9               | 1.2             | 9.626     | A                             |
|                            | Exit  | 1          | 1    |                  | 908                   |                   |       | 908                 | 917                         | 0.0               | 0.0             | 0.000     | A                             |

## 17:45 - 18:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 450                   | 862               | 0.522 | 449                 | 459                         | 2.5               | 1.2             | 11.443    | B                             |
|                            | Exit  | 1          | 1    |                  | 632                   |                   |       | 632                 | 632                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 564                   | 1174              | 0.481 | 564                 | 567                         | 1.2               | 0.8             | 5.163     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 730                   | 1174              | 0.622 | 730                 | 730                         | 2.0               | 1.3             | 6.736     | A                             |
|                            | Exit  | 1          | 1    |                  | 1032                  |                   |       | 1032                | 1056                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 152                   | 668               | 0.228 | 152                 | 161                         | 0.5               | 0.3             | 7.451     | A                             |
|                            |       |            | 2    | 1, 2, 3          | 364                   | 668               | 0.545 | 364                 | 374                         | 1.9               | 1.0             | 10.598    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 515                   |                   |       | 516                 | 531                         | 3.1               | 0.2             | 3.868     | A                             |
|                            | Exit  | 1          | 1    |                  | 399                   |                   |       | 399                 | 400                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 273                   | 783               | 0.348 | 273                 | 275                         | 1.1               | 0.5             | 6.189     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 322                   | 783               | 0.411 | 322                 | 324                         | 1.2               | 0.6             | 6.790     | A                             |
|                            | Exit  | 1          | 1    |                  | 791                   |                   |       | 791                 | 803                         | 0.0               | 0.0             | 0.000     | A                             |

**18:00 - 18:15**

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 438                   | 803               | 0.546 | 438                 | 435                         | 1.2               | 1.3             | 10.283    | B                             |
|                            | Exit  | 1          | 1    |                  | 758                   |                   |       | 758                 | 757                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 517                   | 1193              | 0.433 | 518                 | 515                         | 0.8               | 0.8             | 4.951     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 782                   | 1193              | 0.655 | 782                 | 781                         | 1.3               | 1.7             | 7.304     | A                             |
|                            | Exit  | 1          | 1    |                  | 1181                  |                   |       | 1181                | 1184                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 173                   | 651               | 0.266 | 173                 | 172                         | 0.3               | 0.4             | 7.440     | A                             |
|                            |       |            | 2    | 1, 2, 3          | 362                   | 651               | 0.556 | 362                 | 365                         | 1.0               | 1.0             | 10.475    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 536                   |                   |       | 535                 | 537                         | 0.2               | 0.4             | 2.487     | A                             |
|                            | Exit  | 1          | 1    |                  | 304                   |                   |       | 304                 | 303                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 357                   | 753               | 0.475 | 357                 | 359                         | 0.5               | 0.8             | 7.228     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 386                   | 753               | 0.513 | 385                 | 383                         | 0.6               | 0.8             | 7.512     | A                             |
|                            | Exit  | 1          | 1    |                  | 770                   |                   |       | 770                 | 766                         | 0.0               | 0.0             | 0.000     | A                             |

**18:15 - 18:30**

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1, 2, 3, 4       | 586                   | 726               | 0.808 | 587                 | 574                         | 1.3               | 4.3             | 22.809    | C                             |
|                            | Exit  | 1          | 1    |                  | 611                   |                   |       | 611                 | 608                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 597                   | 1180              | 0.506 | 598                 | 592                         | 0.8               | 0.9             | 5.203     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 706                   | 1180              | 0.598 | 709                 | 702                         | 1.7               | 1.2             | 6.335     | A                             |
|                            | Exit  | 1          | 1    |                  | 1440                  |                   |       | 1440                | 1408                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | (1), 4           | 193                   | 685               | 0.281 | 192                 | 190                         | 0.4               | 0.4             | 7.566     | A                             |
|                            |       |            | 2    | 1, 2, 3          | 507                   | 685               | 0.740 | 506                 | 493                         | 1.0               | 1.8             | 11.709    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 701                   |                   |       | 699                 | 687                         | 0.4               | 1.9             | 7.304     | A                             |
|                            | Exit  | 1          | 1    |                  | 447                   |                   |       | 447                 | 447                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 342                   | 744               | 0.459 | 341                 | 342                         | 0.8               | 0.7             | 6.894     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 372                   | 744               | 0.500 | 371                 | 369                         | 0.8               | 0.8             | 7.283     | A                             |
|                            | Exit  | 1          | 1    |                  | 806                   |                   |       | 806                 | 800                         | 0.0               | 0.0             | 0.000     | A                             |

## Lane movements: Main Results for each time segment

16:30 - 16:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 338                   | 84                      | 1330                         | 719               | 0.470 | 340                 | 335                         | 0.0               | 1.5             | 15.917    |    |
|                            |       |            |      | 3      | 72                    | 18                      | 1330                         | 718               | 0.100 | 72                  | 71                          | 0.0               | 0.4             | 16.169    |    |
|                            |       |            |      | 4      | 75                    | 19                      | 1330                         | 719               | 0.104 | 74                  | 74                          | 0.0               | 0.3             | 15.968    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 208                   | 52                      | 1286                         | 1186              | 0.176 | 208                 | 209                         | 0.0               | 0.4             | 6.041     |    |
|                            |       |            |      | 4      | 411                   | 103                     | 1286                         | 1186              | 0.347 | 411                 | 411                         | 0.0               | 0.6             | 5.241     |    |
|                            |       |            | 2    | 1      | 479                   | 120                     | 1286                         | 1186              | 0.404 | 479                 | 476                         | 0.0               | 1.2             | 8.407     |    |
|                            |       |            |      | 2      | 73                    | 18                      | 1286                         | 1186              | 0.062 | 72                  | 73                          | 0.0               | 0.3             | 8.071     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 245                   | 61                      | 1286                         | 1186              | 0.207 | 245                 | 245                         | 0.0               | 0.3             | 5.121     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 63                    | 16                      | 1069                         | 624               | 0.101 | 63                  | 61                          | 0.0               | 0.2             | 8.034     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 163                   | 41                      | 1069                         | 622               | 0.262 | 164                 | 163                         | 0.0               | 0.4             | 9.064     |    |
|                            |       |            | 2    | 1      | 120                   | 30                      | 1069                         | 622               | 0.193 | 120                 | 119                         | 0.0               | 0.3             | 11.049    |    |
|                            |       |            |      | 2      | 293                   | 73                      | 1069                         | 622               | 0.470 | 292                 | 288                         | 0.0               | 1.1             | 12.235    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 1    | 1      | 183                   | 46                      | -                            | -                 | -     | 183                 | 182                         | 0.0               | 0.3             | 5.114     |    |
|                            |       |            |      | 2      | 293                   | 73                      | -                            | -                 | -     | 293                 | 292                         | 0.0               | 0.5             | 6.051     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 162                   | 41                      | -                            | -                 | -     | 163                 | 165                         | 0.0               | 0.2             | 4.988     |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 23                    | 6                       | 1082                         | 741               | 0.032 | 24                  | 24                          | 0.0               | 0.1             | 9.055     |    |
|                            |       |            |      | 2      | 353                   | 88                      | 1086                         | 744               | 0.474 | 354                 | 351                         | 0.0               | 0.8             | 7.454     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 308                   | 77                      | 1086                         | 743               | 0.414 | 309                 | 306                         | 0.0               | 0.7             | 7.321     |    |
|                            |       |            |      | 3      | 71                    | 18                      | 1086                         | 746               | 0.095 | 72                  | 72                          | 0.0               | 0.1             | 9.076     |    |
|                            |       |            |      | 4      | 41                    | 10                      | 1086                         | 747               | 0.055 | 41                  | 40                          | 0.0               | 0.1             | 8.955     |    |

16:45 - 17:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 243                   | 61                      | 1330                         | 783               | 0.310 | 243                 | 251                         | 1.5               | 0.6             | 9.515     |    |
|                            |       |            |      | 3      | 77                    | 19                      | 1330                         | 784               | 0.099 | 77                  | 79                          | 0.4               | 0.2             | 9.451     |    |
|                            |       |            |      | 4      | 36                    | 9                       | 1330                         | 788               | 0.046 | 35                  | 36                          | 0.3               | 0.1             | 9.477     |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 225                   | 56                      | 1286                         | 1198              | 0.188 | 225                 | 228                         | 0.4               | 0.4             | 6.608     |    |
|                            |       |            |      | 4      | 452                   | 113                     | 1286                         | 1198              | 0.377 | 451                 | 451                         | 0.6               | 0.8             | 5.874     |    |
|                            |       |            | 2    | 1      | 604                   | 151                     | 1286                         | 1198              | 0.504 | 603                 | 601                         | 1.2               | 1.7             | 10.219    |    |
|                            |       |            |      | 2      | 69                    | 17                      | 1286                         | 1198              | 0.057 | 69                  | 69                          | 0.3               | 0.1             | 10.093    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 211                   | 53                      | 1286                         | 1198              | 0.176 | 212                 | 219                         | 0.3               | 0.4             | 5.842     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 64                    | 16                      | 1069                         | 602               | 0.107 | 65                  | 62                          | 0.2               | 0.2             | 8.822     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 144                   | 36                      | 1069                         | 603               | 0.240 | 144                 | 141                         | 0.4               | 0.4             | 9.416     |    |
|                            |       |            | 2    | 1      | 108                   | 27                      | 1069                         | 601               | 0.180 | 108                 | 106                         | 0.3               | 0.4             | 12.760    |    |
|                            |       |            |      | 2      | 347                   | 87                      | 1069                         | 601               | 0.577 | 347                 | 342                         | 1.1               | 1.4             | 14.073    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 1    | 1      | 171                   | 43                      | -                            | -                 | -     | 173                 | 168                         | 0.3               | 0.5             | 10.826    |    |
|                            |       |            |      | 2      | 345                   | 86                      | -                            | -                 | -     | 347                 | 343                         | 0.5               | 1.1             | 11.836    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 144                   | 36                      | -                            | -                 | -     | 144                 | 142                         | 0.2               | 0.4             | 10.127    |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 54                    | 13                      | 1086                         | 691               | 0.078 | 54                  | 54                          | 0.1               | 0.1             | 8.773     |    |
|                            |       |            |      | 2      | 256                   | 64                      | 1086                         | 689               | 0.372 | 256                 | 259                         | 0.8               | 0.5             | 7.250     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 231                   | 58                      | 1086                         | 690               | 0.334 | 232                 | 229                         | 0.7               | 0.5             | 7.149     |    |
|                            |       |            |      | 3      | 103                   | 26                      | 1086                         | 689               | 0.150 | 103                 | 102                         | 0.1               | 0.3             | 9.344     |    |
|                            |       |            |      | 4      | 12                    | 3                       | 1035                         | 666               | 0.019 | 12                  | 13                          | 0.1               | 0.0             | 9.306     |    |

17:00 - 17:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 284                   | 71                      | 1330                         | 638               | 0.445 | 286                 | 283                         | 0.6               | 1.3             | 16.168    |    |
|                            |       |            |      | 3      | 78                    | 20                      | 1330                         | 643               | 0.122 | 80                  | 81                          | 0.2               | 0.3             | 16.110    |    |
|                            |       |            |      | 4      | 63                    | 16                      | 1330                         | 643               | 0.099 | 64                  | 64                          | 0.1               | 0.3             | 15.974    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 259                   | 65                      | 1286                         | 1187              | 0.219 | 258                 | 255                         | 0.4               | 0.5             | 6.642     |    |
|                            |       |            |      | 4      | 444                   | 111                     | 1286                         | 1187              | 0.374 | 444                 | 440                         | 0.8               | 0.7             | 5.915     |    |
|                            |       | 2          | 2    | 1      | 498                   | 125                     | 1286                         | 1187              | 0.420 | 498                 | 502                         | 1.7               | 1.5             | 10.025    |    |
|                            |       |            |      | 2      | 139                   | 35                      | 1286                         | 1186              | 0.118 | 140                 | 138                         | 0.1               | 0.3             | 9.583     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 238                   | 59                      | 1286                         | 1187              | 0.200 | 238                 | 237                         | 0.4               | 0.4             | 5.750     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 83                    | 21                      | 1069                         | 592               | 0.140 | 82                  | 81                          | 0.2               | 0.3             | 10.618    |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 187                   | 47                      | 1069                         | 590               | 0.317 | 187                 | 181                         | 0.4               | 0.6             | 11.252    |    |
|                            |       |            | 2    | 1      | 128                   | 32                      | 1069                         | 591               | 0.217 | 127                 | 125                         | 0.4               | 0.6             | 15.958    |    |
|                            |       |            |      | 2      | 420                   | 105                     | 1069                         | 590               | 0.711 | 421                 | 413                         | 1.4               | 2.1             | 16.786    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 1    | 1      | 226                   | 57                      | -                            | -                 | -     | 211                 | 208                         | 0.5               | 5.0             | 53.834    |    |
|                            |       |            |      | 2      | 449                   | 112                     | -                            | -                 | -     | 420                 | 416                         | 1.1               | 10.5            | 56.960    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 201                   | 50                      | -                            | -                 | -     | 187                 | 182                         | 0.4               | 4.5             | 53.609    |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 49                    | 12                      | 1086                         | 663               | 0.075 | 49                  | 49                          | 0.1               | 0.2             | 11.066    |    |
|                            |       |            |      | 2      | 326                   | 82                      | 1086                         | 664               | 0.492 | 326                 | 325                         | 0.5               | 0.9             | 9.139     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 290                   | 73                      | 1086                         | 664               | 0.437 | 289                 | 291                         | 0.5               | 0.8             | 9.128     |    |
|                            |       |            |      | 3      | 80                    | 20                      | 1086                         | 664               | 0.120 | 81                  | 80                          | 0.3               | 0.2             | 11.340    |    |
|                            |       |            |      | 4      | 32                    | 8                       | 1086                         | 662               | 0.048 | 32                  | 32                          | 0.0               | 0.1             | 11.266    |    |

17:15 - 17:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 320                   | 80                      | 1330                         | 715               | 0.447 | 323                 | 314                         | 1.3               | 1.5             | 19.976    |    |
|                            |       |            |      | 3      | 125                   | 31                      | 1330                         | 714               | 0.174 | 126                 | 124                         | 0.3               | 0.5             | 19.964    |    |
|                            |       |            |      | 4      | 53                    | 13                      | 1330                         | 715               | 0.074 | 53                  | 52                          | 0.3               | 0.3             | 20.041    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 222                   | 56                      | 1286                         | 1165              | 0.191 | 222                 | 221                         | 0.5               | 0.4             | 6.947     |    |
|                            |       |            |      | 4      | 447                   | 112                     | 1286                         | 1165              | 0.384 | 447                 | 452                         | 0.7               | 0.8             | 6.069     |    |
|                            |       | 2          | 2    | 1      | 466                   | 117                     | 1286                         | 1165              | 0.400 | 467                 | 465                         | 1.5               | 1.1             | 9.411     |    |
|                            |       |            |      | 2      | 97                    | 24                      | 1286                         | 1165              | 0.083 | 96                  | 96                          | 0.3               | 0.3             | 9.108     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 270                   | 68                      | 1286                         | 1165              | 0.232 | 270                 | 270                         | 0.4               | 0.4             | 5.914     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 86                    | 22                      | 1069                         | 599               | 0.144 | 87                  | 87                          | 0.3               | 0.2             | 10.724    |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 179                   | 45                      | 1069                         | 601               | 0.298 | 179                 | 183                         | 0.6               | 0.6             | 11.053    |    |
|                            |       |            | 2    | 1      | 140                   | 35                      | 1069                         | 601               | 0.233 | 140                 | 140                         | 0.6               | 0.6             | 14.771    |    |
|                            |       |            |      | 2      | 355                   | 89                      | 1069                         | 602               | 0.590 | 355                 | 373                         | 2.1               | 1.5             | 16.102    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 1    | 1      | 220                   | 55                      | -                            | -                 | -     | 226                 | 227                         | 5.0               | 2.0             | 51.873    |    |
|                            |       |            |      | 2      | 342                   | 85                      | -                            | -                 | -     | 355                 | 371                         | 10.5              | 3.2             | 53.113    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 173                   | 43                      | -                            | -                 | -     | 179                 | 183                         | 4.5               | 1.5             | 51.686    |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 25                    | 6                       | 1086                         | 702               | 0.036 | 25                  | 25                          | 0.2               | 0.1             | 9.393     |    |
|                            |       |            |      | 2      | 306                   | 77                      | 1086                         | 704               | 0.435 | 308                 | 313                         | 0.9               | 0.6             | 8.037     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 254                   | 64                      | 1086                         | 705               | 0.360 | 254                 | 253                         | 0.8               | 0.6             | 8.023     |    |
|                            |       |            |      | 3      | 86                    | 22                      | 1086                         | 705               | 0.122 | 86                  | 90                          | 0.2               | 0.2             | 10.475    |    |
|                            |       |            |      | 4      | 48                    | 12                      | 1086                         | 704               | 0.068 | 48                  | 48                          | 0.1               | 0.1             | 10.652    |    |

17:30 - 17:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 368                   | 92                      | 1330                         | 674               | 0.546 | 367                 | 362                         | 1.5               | 2.0             | 18.501    |    |
|                            |       |            |      | 3      | 67                    | 17                      | 1330                         | 674               | 0.100 | 68                  | 68                          | 0.5               | 0.4             | 18.589    |    |
|                            |       |            |      | 4      | 28                    | 7                       | 1326                         | 668               | 0.041 | 28                  | 28                          | 0.3               | 0.1             | 18.873    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 197                   | 49                      | 1286                         | 1192              | 0.166 | 197                 | 203                         | 0.4               | 0.4             | 6.409     |    |
|                            |       |            |      | 4      | 454                   | 113                     | 1286                         | 1191              | 0.381 | 452                 | 451                         | 0.8               | 0.8             | 5.685     |    |
|                            |       | 2          | 2    | 1      | 516                   | 129                     | 1286                         | 1191              | 0.433 | 517                 | 513                         | 1.1               | 1.4             | 9.482     |    |
|                            |       |            |      | 2      | 93                    | 23                      | 1286                         | 1191              | 0.078 | 93                  | 92                          | 0.3               | 0.2             | 8.943     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 239                   | 60                      | 1286                         | 1191              | 0.201 | 238                 | 242                         | 0.4               | 0.4             | 5.590     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 72                    | 18                      | 1069                         | 605               | 0.120 | 72                  | 73                          | 0.2               | 0.2             | 9.360     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 145                   | 36                      | 1069                         | 605               | 0.239 | 147                 | 152                         | 0.6               | 0.3             | 9.731     |    |
|                            |       |            | 2    | 1      | 120                   | 30                      | 1069                         | 605               | 0.199 | 121                 | 123                         | 0.6               | 0.5             | 13.033    |    |
|                            |       |            |      | 2      | 338                   | 85                      | 1069                         | 605               | 0.559 | 338                 | 342                         | 1.5               | 1.4             | 14.319    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 1    | 1      | 192                   | 48                      | -                            | -                 | -     | 192                 | 196                         | 2.0               | 0.8             | 18.438    |    |
|                            |       |            |      | 2      | 338                   | 85                      | -                            | -                 | -     | 338                 | 341                         | 3.2               | 1.7             | 19.570    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 144                   | 36                      | -                            | -                 | -     | 145                 | 150                         | 1.5               | 0.6             | 16.994    |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 45                    | 11                      | 1086                         | 706               | 0.064 | 45                  | 43                          | 0.1               | 0.1             | 10.326    |    |
|                            |       |            |      | 2      | 350                   | 88                      | 1086                         | 706               | 0.496 | 349                 | 351                         | 0.6               | 0.9             | 8.711     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 292                   | 73                      | 1086                         | 706               | 0.413 | 291                 | 287                         | 0.6               | 0.7             | 8.722     |    |
|                            |       |            |      | 3      | 108                   | 27                      | 1086                         | 705               | 0.152 | 107                 | 108                         | 0.2               | 0.3             | 11.327    |    |
|                            |       |            |      | 4      | 43                    | 11                      | 1086                         | 705               | 0.061 | 44                  | 44                          | 0.1               | 0.1             | 11.303    |    |

17:45 - 18:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 286                   | 71                      | 1330                         | 863               | 0.331 | 285                 | 293                         | 2.0               | 0.8             | 11.503    |    |
|                            |       |            |      | 3      | 95                    | 24                      | 1330                         | 863               | 0.110 | 95                  | 96                          | 0.4               | 0.3             | 11.352    |    |
|                            |       |            |      | 4      | 69                    | 17                      | 1330                         | 862               | 0.080 | 69                  | 69                          | 0.1               | 0.2             | 11.330    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 196                   | 49                      | 1286                         | 1173              | 0.167 | 195                 | 194                         | 0.4               | 0.4             | 5.628     |    |
|                            |       |            |      | 4      | 368                   | 92                      | 1286                         | 1174              | 0.314 | 369                 | 372                         | 0.8               | 0.5             | 4.909     |    |
|                            |       | 2          | 2    | 1      | 442                   | 111                     | 1286                         | 1174              | 0.377 | 442                 | 437                         | 1.4               | 0.9             | 7.717     |    |
|                            |       |            |      | 2      | 55                    | 14                      | 1286                         | 1173              | 0.047 | 55                  | 56                          | 0.2               | 0.1             | 7.373     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 233                   | 58                      | 1286                         | 1174              | 0.198 | 233                 | 237                         | 0.4               | 0.3             | 4.845     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 49                    | 12                      | 1069                         | 669               | 0.073 | 49                  | 53                          | 0.2               | 0.1             | 7.076     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 103                   | 26                      | 1069                         | 668               | 0.154 | 103                 | 108                         | 0.3               | 0.2             | 7.634     |    |
|                            |       |            | 2    | 1      | 99                    | 25                      | 1069                         | 668               | 0.148 | 99                  | 100                         | 0.5               | 0.2             | 9.636     |    |
|                            |       |            |      | 2      | 265                   | 66                      | 1069                         | 668               | 0.396 | 264                 | 274                         | 1.4               | 0.8             | 10.973    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 1    | 1      | 148                   | 37                      | -                            | -                 | -     | 148                 | 152                         | 0.8               | 0.1             | 3.612     |    |
|                            |       |            |      | 2      | 264                   | 66                      | -                            | -                 | -     | 265                 | 272                         | 1.7               | 0.1             | 4.233     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 103                   | 26                      | -                            | -                 | -     | 103                 | 108                         | 0.6               | 0.0             | 3.358     |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 41                    | 10                      | 1086                         | 786               | 0.052 | 41                  | 42                          | 0.1               | 0.1             | 7.183     |    |
|                            |       |            |      | 2      | 232                   | 58                      | 1086                         | 784               | 0.296 | 232                 | 233                         | 0.9               | 0.4             | 6.012     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 197                   | 49                      | 1086                         | 783               | 0.251 | 196                 | 199                         | 0.7               | 0.4             | 6.078     |    |
|                            |       |            |      | 3      | 109                   | 27                      | 1086                         | 783               | 0.139 | 109                 | 109                         | 0.3               | 0.2             | 7.911     |    |
|                            |       |            |      | 4      | 16                    | 4                       | 1072                         | 773               | 0.021 | 17                  | 16                          | 0.1               | 0.0             | 7.936     |    |

18:00 - 18:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 303                   | 76                      | 1330                         | 802               | 0.377 | 302                 | 301                         | 0.8               | 0.9             | 10.315    |    |
|                            |       |            |      | 3      | 91                    | 23                      | 1330                         | 801               | 0.114 | 92                  | 90                          | 0.3               | 0.2             | 10.020    |    |
|                            |       |            |      | 4      | 44                    | 11                      | 1330                         | 804               | 0.055 | 44                  | 44                          | 0.2               | 0.1             | 10.611    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 124                   | 31                      | 1286                         | 1193              | 0.104 | 124                 | 125                         | 0.4               | 0.2             | 5.317     |    |
|                            |       |            |      | 4      | 393                   | 98                      | 1286                         | 1193              | 0.329 | 393                 | 390                         | 0.5               | 0.6             | 4.830     |    |
|                            |       | 2          | 2    | 1      | 545                   | 136                     | 1286                         | 1193              | 0.457 | 545                 | 545                         | 0.9               | 1.3             | 8.228     |    |
|                            |       |            |      | 2      | 39                    | 10                      | 1286                         | 1193              | 0.033 | 39                  | 40                          | 0.1               | 0.1             | 8.014     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 197                   | 49                      | 1286                         | 1193              | 0.165 | 198                 | 196                         | 0.3               | 0.3             | 4.679     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 54                    | 14                      | 1069                         | 653               | 0.083 | 55                  | 53                          | 0.1               | 0.1             | 6.945     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 119                   | 30                      | 1069                         | 651               | 0.182 | 118                 | 119                         | 0.2               | 0.3             | 7.661     |    |
|                            |       | 2          | 2    | 1      | 104                   | 26                      | 1069                         | 652               | 0.160 | 104                 | 103                         | 0.2               | 0.3             | 9.577     |    |
|                            |       |            |      | 2      | 257                   | 64                      | 1069                         | 651               | 0.395 | 258                 | 262                         | 0.8               | 0.8             | 10.853    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 55                    | 14                      | 1086                         | 752               | 0.073 | 55                  | 56                          | 0.1               | 0.1             | 8.357     |    |
|                            |       |            |      | 2      | 303                   | 76                      | 1086                         | 753               | 0.402 | 302                 | 303                         | 0.4               | 0.6             | 7.021     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 282                   | 70                      | 1086                         | 753               | 0.374 | 280                 | 278                         | 0.4               | 0.6             | 6.998     |    |
|                            |       |            |      | 3      | 88                    | 22                      | 1086                         | 752               | 0.117 | 88                  | 88                          | 0.2               | 0.2             | 8.905     |    |
|                            |       |            |      | 4      | 16                    | 4                       | 1072                         | 744               | 0.022 | 17                  | 17                          | 0.0               | 0.0             | 8.761     |    |

18:15 - 18:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Un |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|----|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 410                   | 103                     | 1330                         | 725               | 0.566 | 410                 | 398                         | 0.9               | 3.0             | 22.931    |    |
|                            |       |            |      | 3      | 117                   | 29                      | 1330                         | 725               | 0.162 | 117                 | 117                         | 0.2               | 0.8             | 22.311    |    |
|                            |       |            |      | 4      | 58                    | 15                      | 1330                         | 730               | 0.080 | 59                  | 59                          | 0.1               | 0.4             | 23.005    |    |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 246                   | 61                      | 1286                         | 1180              | 0.208 | 246                 | 245                         | 0.2               | 0.4             | 5.671     |    |
|                            |       |            |      | 4      | 352                   | 88                      | 1286                         | 1180              | 0.298 | 352                 | 347                         | 0.6               | 0.5             | 4.857     |    |
|                            |       | 2          | 2    | 1      | 402                   | 101                     | 1286                         | 1180              | 0.341 | 405                 | 398                         | 1.3               | 0.8             | 7.286     |    |
|                            |       |            |      | 2      | 53                    | 13                      | 1286                         | 1179              | 0.045 | 53                  | 52                          | 0.1               | 0.1             | 6.971     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 250                   | 63                      | 1286                         | 1180              | 0.212 | 252                 | 252                         | 0.3               | 0.3             | 4.760     |    |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 64                    | 16                      | 1069                         | 688               | 0.093 | 64                  | 64                          | 0.1               | 0.1             | 7.329     |    |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 129                   | 32                      | 1069                         | 686               | 0.188 | 128                 | 126                         | 0.3               | 0.3             | 7.688     |    |
|                            |       |            | 2    | 1      | 105                   | 26                      | 1069                         | 686               | 0.153 | 105                 | 105                         | 0.3               | 0.4             | 10.972    |    |
|                            |       |            |      | 2      | 402                   | 100                     | 1069                         | 686               | 0.586 | 401                 | 388                         | 0.8               | 1.5             | 11.921    |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 1    | 1      | 169                   | 42                      | -                            | -                 | -     | 169                 | 170                         | 0.1               | 0.4             | 6.758     |    |
|                            |       |            |      | 2      | 402                   | 100                     | -                            | -                 | -     | 402                 | 391                         | 0.3               | 1.1             | 7.800     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 130                   | 33                      | -                            | -                 | -     | 129                 | 126                         | 0.1               | 0.3             | 6.582     |    |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 38                    | 10                      | 1086                         | 746               | 0.051 | 38                  | 40                          | 0.1               | 0.1             | 7.808     |    |
|                            |       |            |      | 2      | 304                   | 76                      | 1086                         | 744               | 0.408 | 303                 | 302                         | 0.6               | 0.7             | 6.774     |    |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       | 2          | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     |    |
|                            |       |            |      | 2      | 273                   | 68                      | 1086                         | 745               | 0.366 | 273                 | 268                         | 0.6               | 0.6             | 6.859     |    |
|                            |       |            |      | 3      | 84                    | 21                      | 1086                         | 747               | 0.113 | 84                  | 85                          | 0.2               | 0.2             | 8.399     |    |
|                            |       |            |      | 4      | 15                    | 4                       | 1061                         | 731               | 0.021 | 15                  | 16                          | 0.0               | 0.0             | 8.441     |    |





## Appendix C

TRL Junctions Report:

Proposed Geometry

Baseline Traffic; Baseline + Outline Application; and, Baseline + Outline & Net Development

| Junctions 10                                                                                                                                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| ARCADY 10 - Roundabout Module                                                                                                                                    |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Version: 10.0.2.1574                                                                                                                                             |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| +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: Hambledon Road\_Milton Road\_Elettra Av Mit (2021) (RevA).j10

Path: P:\19000's\19235\Technical

Report generation date: 01/12/2021 09:51:16

- »(Default Analysis Set) - 2026 Base + Com Dev, PM
- »(Default Analysis Set) - 2026 Base + Com Dev, SAT
- »(Default Analysis Set) - 2026 Base + Com Dev + Dev, PM
- »(Default Analysis Set) - 2026 Base + Com Dev + Dev, SAT
- »(Default Analysis Set) - 2026 Base + Com Dev + Dev Sens, AM
- »(Default Analysis Set) - 2026 Base + Com Dev + Dev Sens, PM
- »(Default Analysis Set) - 2026 Base + Com Dev + Dev Sens, SAT
- »(Default Analysis Set) - 2026 Base + Com Dev + Dev, AM DIRECT
- »(Default Analysis Set) - 2026 Base + Com Dev, AM DIRECT

#### Summary of junction performance

|                            | PM                                  |             |           |      |     | SAT    |             |           |      |     | AM     |             |           |      |     | AM DIRECT |             |           |      |
|----------------------------|-------------------------------------|-------------|-----------|------|-----|--------|-------------|-----------|------|-----|--------|-------------|-----------|------|-----|-----------|-------------|-----------|------|
|                            | Set ID                              | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID | Queue (PCU) | Delay (s) | RFC  | LOS | Set ID    | Queue (PCU) | Delay (s) | RFC  |
|                            | A1 - 2026 Base + Com Dev            |             |           |      |     |        |             |           |      |     |        |             |           |      |     |           |             |           |      |
| 1 - Milton road            | D5                                  | 2.0         | 13.33     | 0.66 | B   | D6     | 2.0         | 10.91     | 0.66 | B   |        |             |           |      |     | D14       | 2.8         | 15.66     | 0.74 |
| 2 - Hambledon Road (south) |                                     | 4.1         | 8.25      | 0.80 | A   |        | 2.2         | 5.22      | 0.69 | A   |        |             |           |      |     |           | 2.5         | 5.60      | 0.72 |
| 3 - Elettra Avenue         |                                     | 2.4         | 8.76      | 0.71 | A   |        | 0.9         | 4.11      | 0.46 | A   |        |             |           |      |     |           | 0.8         | 3.95      | 0.45 |
| 4 - Hambledon Road (north) |                                     | 2.9         | 12.35     | 0.75 | B   |        | 1.2         | 5.37      | 0.54 | A   |        |             |           |      |     |           | 2.2         | 7.22      | 0.70 |
|                            | A1 - 2026 Base + Com Dev + Dev      |             |           |      |     |        |             |           |      |     |        |             |           |      |     |           |             |           |      |
| 1 - Milton road            | D8                                  | 2.2         | 15.21     | 0.68 | C   | D9     | 1.9         | 11.02     | 0.65 | B   |        |             |           |      |     | D13       | 4.0         | 22.03     | 0.81 |
| 2 - Hambledon Road (south) |                                     | 4.7         | 9.08      | 0.83 | A   |        | 2.4         | 5.49      | 0.71 | A   |        |             |           |      |     |           | 3.4         | 7.11      | 0.78 |
| 3 - Elettra Avenue         |                                     | 3.3         | 11.00     | 0.77 | B   |        | 1.0         | 4.28      | 0.49 | A   |        |             |           |      |     |           | 0.9         | 4.39      | 0.49 |
| 4 - Hambledon Road (north) |                                     | 3.4         | 14.58     | 0.78 | B   |        | 1.2         | 5.49      | 0.54 | A   |        |             |           |      |     |           | 2.6         | 8.34      | 0.73 |
|                            | A1 - 2026 Base + Com Dev + Dev Sens |             |           |      |     |        |             |           |      |     |        |             |           |      |     |           |             |           |      |
| 1 - Milton road            | D11                                 | 2.2         | 15.21     | 0.68 | C   | D12    | 1.9         | 11.02     | 0.65 | B   | D10    | 5.1         | 29.08     | 0.85 | D   |           |             |           |      |
| 2 - Hambledon Road (south) |                                     | 4.5         | 8.92      | 0.82 | A   |        | 2.3         | 5.43      | 0.70 | A   |        | 3.1         | 6.83      | 0.75 | A   |           |             |           |      |
| 3 - Elettra Avenue         |                                     | 3.3         | 11.00     | 0.77 | B   |        | 1.0         | 4.28      | 0.49 | A   |        | 0.8         | 4.18      | 0.43 | A   |           |             |           |      |
| 4 - Hambledon Road (north) |                                     | 3.7         | 15.22     | 0.79 | C   |        | 1.2         | 5.58      | 0.55 | A   |        | 2.9         | 8.95      | 0.74 | A   |           |             |           |      |

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

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

## File summary

### File Description

|                    |                                             |
|--------------------|---------------------------------------------|
| <b>Title</b>       | Hambledon Road/ Milton Road/ Elettra Avenue |
| <b>Location</b>    | Waterlooville                               |
| <b>Site number</b> |                                             |
| <b>Date</b>        | 19/10/2021                                  |
| <b>Version</b>     |                                             |
| <b>Status</b>      | (new file)                                  |
| <b>Identifier</b>  |                                             |
| <b>Client</b>      |                                             |
| <b>Jobnumber</b>   | 19235                                       |
| <b>Enumerator</b>  | DTA\arcady                                  |
| <b>Description</b> |                                             |

## 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 iterations with HCM roundabouts | Max number of iterations for roundabouts |
|--------------------|-----------------------------|-----------------------------------|-----------------------------------|-----------------------------------|-----------------------------|---------------|-----------------------------|-----------------------|-------------------------------------|------------------------------------------|
| 5.75               |                             |                                   |                                   |                                   |                             | 0.85          | 36.00                       | 20.00                 |                                     | 500                                      |

## Demand Set Summary

| ID  | Scenario name                  | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|--------------------------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D1  | 2021 Base                      | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        |                   |
| D2  | 2021 Base                      | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        |                   |
| D3  | 2021 Base                      | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        |                   |
| D4  | 2026 Base + Com Dev            | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        |                   |
| D5  | 2026 Base + Com Dev            | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        | ✓                 |
| D6  | 2026 Base + Com Dev            | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        | ✓                 |
| D7  | 2026 Base + Com Dev + Dev      | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        |                   |
| D8  | 2026 Base + Com Dev + Dev      | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        | ✓                 |
| D9  | 2026 Base + Com Dev + Dev      | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        | ✓                 |
| D10 | 2026 Base + Com Dev + Dev Sens | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        | ✓                 |
| D11 | 2026 Base + Com Dev + Dev Sens | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        | ✓                 |
| D12 | 2026 Base + Com Dev + Dev Sens | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        | ✓                 |
| D13 | 2026 Base + Com Dev + Dev      | AM DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |
| D14 | 2026 Base + Com Dev            | AM DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |

## Analysis Set Details

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

# (Default Analysis Set) - 2026 Base + Com Dev, PM

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 9.87               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 9.87              | A           |

## Arms

### Arms

| Arm | Name                   | Description | No give-way line |
|-----|------------------------|-------------|------------------|
| 1   | Milton road            |             |                  |
| 2   | Hambledon Road (south) |             |                  |
| 3   | Elettra Avenue         |             |                  |
| 4   | Hambledon Road (north) |             |                  |

### Roundabout Geometry

| Arm                        | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Entry only | Exit only |
|----------------------------|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|------------|-----------|
| 1 - Milton road            | 3.40                             | 7.40                | 12.0                            | 20.0                 | 54.0                              | 15.2                               |            |           |
| 2 - Hambledon Road (south) | 7.30                             | 8.05                | 12.7                            | 47.5                 | 54.0                              | 18.0                               |            |           |
| 3 - Elettra Avenue         | 3.65                             | 10.50               | 52.6                            | 18.0                 | 54.0                              | 22.0                               |            |           |
| 4 - Hambledon Road (north) | 6.80                             | 7.90                | 5.0                             | 15.0                 | 54.0                              | 36.0                               |            |           |

### Slope / Intercept / Capacity

#### Arm Intercept Adjustments

| Arm                        | Type   | Reason | Direct intercept adjustment (PCU/hr) |
|----------------------------|--------|--------|--------------------------------------|
| 1 - Milton road            | Direct |        | 0                                    |
| 2 - Hambledon Road (south) | None   |        |                                      |
| 3 - Elettra Avenue         | None   |        |                                      |
| 4 - Hambledon Road (north) | None   |        |                                      |

#### Roundabout Slope and Intercept used in model

| Arm                        | Final slope | Final intercept (PCU/hr) |
|----------------------------|-------------|--------------------------|
| 1 - Milton road            | 0.604       | 1700                     |
| 2 - Hambledon Road (south) | 0.769       | 2571                     |
| 3 - Elettra Avenue         | 0.766       | 2628                     |
| 4 - Hambledon Road (north) | 0.666       | 2172                     |

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

### Arm Capacity Adjustments

| Arm             | Type   | Reason | Direct capacity adjustment (PCU/hr) |
|-----------------|--------|--------|-------------------------------------|
| 1 - Milton road | Direct |        | 0                                   |

## 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 |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2026 Base + Com Dev | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 498                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1661                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 913                     | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 799                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 313                        | 138                | 47                         |
|      | 2 - Hambledon Road (south) | 539             | 102                        | 308                | 712                        |
|      | 3 - Elettra Avenue         | 256             | 459                        | 0                  | 198                        |
|      | 4 - Hambledon Road (north) | 43              | 596                        | 125                | 35                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 3               | 2                          | 0                  | 6                          |
|      | 3 - Elettra Avenue         | 0               | 1                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 0               | 4                          | 0                  | 1                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.66    | 13.33         | 2.0             | B       | 457                     | 685                           |
| 2 - Hambledon Road (south) | 0.80    | 8.25          | 4.1             | A       | 1524                    | 2286                          |
| 3 - Elettra Avenue         | 0.71    | 8.76          | 2.4             | A       | 838                     | 1257                          |
| 4 - Hambledon Road (north) | 0.75    | 12.35         | 2.9             | B       | 733                     | 1100                          |

## Main Results for each time segment

### 16:30 - 16:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 375                   | 94                      | 987                       | 1104              | 0.340 | 373                 | 629                             | 0.0               | 0.5             | 5.040     | A                             |
| 2 - Hambledon Road (south) | 1250                  | 313                     | 258                       | 2372              | 0.527 | 1246                | 1102                            | 0.0               | 1.1             | 3.297     | A                             |
| 3 - Elettra Avenue         | 687                   | 172                     | 1076                      | 1804              | 0.381 | 685                 | 428                             | 0.0               | 0.6             | 3.233     | A                             |
| 4 - Hambledon Road (north) | 602                   | 150                     | 1017                      | 1495              | 0.402 | 599                 | 744                             | 0.0               | 0.7             | 4.125     | A                             |

### 16:45 - 17:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 448                   | 112                     | 1181                      | 986               | 0.454 | 446                 | 752                             | 0.5               | 0.8             | 6.822     | A                             |
| 2 - Hambledon Road (south) | 1493                  | 373                     | 309                       | 2333              | 0.640 | 1491                | 1318                            | 1.1               | 1.8             | 4.411     | A                             |
| 3 - Elettra Avenue         | 821                   | 205                     | 1288                      | 1642              | 0.500 | 819                 | 512                             | 0.6               | 1.0             | 4.398     | A                             |
| 4 - Hambledon Road (north) | 718                   | 180                     | 1217                      | 1362              | 0.527 | 717                 | 890                             | 0.7               | 1.1             | 5.727     | A                             |

### 17:00 - 17:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 548                   | 137                     | 1440                      | 830               | 0.661 | 544                 | 918                             | 0.8               | 1.9             | 12.721    | B                             |
| 2 - Hambledon Road (south) | 1829                  | 457                     | 377                       | 2281              | 0.802 | 1820                | 1607                            | 1.8               | 4.0             | 7.936     | A                             |
| 3 - Elettra Avenue         | 1005                  | 251                     | 1572                      | 1424              | 0.706 | 1000                | 625                             | 1.0               | 2.3             | 8.438     | A                             |
| 4 - Hambledon Road (north) | 880                   | 220                     | 1485                      | 1183              | 0.743 | 873                 | 1087                            | 1.1               | 2.8             | 11.695    | B                             |

### 17:15 - 17:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 548                   | 137                     | 1450                      | 825               | 0.665 | 548                 | 922                             | 1.9               | 2.0             | 13.326    | B                             |
| 2 - Hambledon Road (south) | 1829                  | 457                     | 380                       | 2279              | 0.802 | 1828                | 1618                            | 4.0               | 4.1             | 8.254     | A                             |
| 3 - Elettra Avenue         | 1005                  | 251                     | 1580                      | 1418              | 0.709 | 1005                | 628                             | 2.3               | 2.4             | 8.757     | A                             |
| 4 - Hambledon Road (north) | 880                   | 220                     | 1493                      | 1178              | 0.746 | 879                 | 1092                            | 2.8               | 2.9             | 12.355    | B                             |

### 17:30 - 17:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 448                   | 112                     | 1194                      | 979               | 0.457 | 452                 | 758                             | 2.0               | 0.9             | 7.068     | A                             |
| 2 - Hambledon Road (south) | 1493                  | 373                     | 313                       | 2330              | 0.641 | 1502                | 1333                            | 4.1               | 1.9             | 4.551     | A                             |
| 3 - Elettra Avenue         | 821                   | 205                     | 1298                      | 1634              | 0.502 | 826                 | 517                             | 2.4               | 1.0             | 4.519     | A                             |
| 4 - Hambledon Road (north) | 718                   | 180                     | 1227                      | 1355              | 0.530 | 725                 | 898                             | 2.9               | 1.2             | 5.950     | A                             |

### 17:45 - 18:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 375                   | 94                      | 994                       | 1099              | 0.341 | 376                 | 632                             | 0.9               | 0.5             | 5.116     | A                             |
| 2 - Hambledon Road (south) | 1250                  | 313                     | 261                       | 2371              | 0.527 | 1253                | 1110                            | 1.9               | 1.2             | 3.345     | A                             |
| 3 - Elettra Avenue         | 687                   | 172                     | 1083                      | 1799              | 0.382 | 689                 | 431                             | 1.0               | 0.6             | 3.272     | A                             |
| 4 - Hambledon Road (north) | 602                   | 150                     | 1023                      | 1491              | 0.403 | 603                 | 749                             | 1.2               | 0.7             | 4.187     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev, SAT

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 6.04               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 6.04              | 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 |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2026 Base + Com Dev | SAT              | ONE HOUR             | 11:15              | 12:45               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 602                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1390                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 687                     | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 719                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 368                        | 168                | 66                         |
|      | 2 - Hambledon Road (south) | 405             | 27                         | 314                | 644                        |
|      | 3 - Elettra Avenue         | 199             | 330                        | 0                  | 158                        |
|      | 4 - Hambledon Road (north) | 25              | 525                        | 132                | 37                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 1                  | 0                          |
|      | 2 - Hambledon Road (south) | 3               | 0                          | 1                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 0                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 4               | 1                          | 0                  | 0                          |

## Results

### Results Summary for whole modelled period

| Am                         | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.66    | 10.91         | 2.0             | B       | 552                     | 829                           |
| 2 - Hambledon Road (south) | 0.69    | 5.22          | 2.2             | A       | 1275                    | 1913                          |
| 3 - Elettra Avenue         | 0.46    | 4.11          | 0.9             | A       | 630                     | 946                           |
| 4 - Hambledon Road (north) | 0.54    | 5.37          | 1.2             | A       | 660                     | 990                           |

### Main Results for each time segment

#### 11:15 - 11:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 453                   | 113                     | 789                       | 1224              | 0.370 | 451                 | 472                             | 0.0               | 0.6             | 4.770     | A                             |
| 2 - Hambledon Road (south) | 1046                  | 262                     | 302                       | 2339              | 0.447 | 1043                | 937                             | 0.0               | 0.8             | 2.814     | A                             |
| 3 - Elettra Avenue         | 517                   | 129                     | 885                       | 1951              | 0.265 | 516                 | 460                             | 0.0               | 0.4             | 2.512     | A                             |
| 4 - Hambledon Road (north) | 541                   | 135                     | 721                       | 1692              | 0.320 | 539                 | 679                             | 0.0               | 0.5             | 3.145     | A                             |

#### 11:30 - 11:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 541                   | 135                     | 944                       | 1130              | 0.479 | 540                 | 565                             | 0.6               | 0.9             | 6.251     | A                             |
| 2 - Hambledon Road (south) | 1250                  | 312                     | 362                       | 2293              | 0.545 | 1248                | 1122                            | 0.8               | 1.2             | 3.494     | A                             |
| 3 - Elettra Avenue         | 618                   | 154                     | 1059                      | 1818              | 0.340 | 617                 | 551                             | 0.4               | 0.5             | 3.003     | A                             |
| 4 - Hambledon Road (north) | 646                   | 162                     | 863                       | 1598              | 0.405 | 646                 | 813                             | 0.5               | 0.7             | 3.809     | A                             |

#### 11:45 - 12:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 663                   | 166                     | 1155                      | 1003              | 0.661 | 659                 | 691                             | 0.9               | 1.9             | 10.630    | B                             |
| 2 - Hambledon Road (south) | 1530                  | 383                     | 442                       | 2232              | 0.686 | 1527                | 1372                            | 1.2               | 2.2             | 5.156     | A                             |
| 3 - Elettra Avenue         | 756                   | 189                     | 1295                      | 1637              | 0.462 | 755                 | 674                             | 0.5               | 0.9             | 4.086     | A                             |
| 4 - Hambledon Road (north) | 792                   | 198                     | 1056                      | 1469              | 0.539 | 790                 | 994                             | 0.7               | 1.2             | 5.328     | A                             |

#### 12:00 - 12:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 663                   | 166                     | 1157                      | 1001              | 0.662 | 663                 | 693                             | 1.9               | 2.0             | 10.911    | B                             |
| 2 - Hambledon Road (south) | 1530                  | 383                     | 444                       | 2230              | 0.686 | 1530                | 1376                            | 2.2               | 2.2             | 5.222     | A                             |
| 3 - Elettra Avenue         | 756                   | 189                     | 1298                      | 1634              | 0.463 | 756                 | 676                             | 0.9               | 0.9             | 4.110     | A                             |
| 4 - Hambledon Road (north) | 792                   | 198                     | 1058                      | 1468              | 0.539 | 792                 | 996                             | 1.2               | 1.2             | 5.369     | A                             |

**12:15 - 12:30**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 541                   | 135                     | 947                       | 1128              | 0.480 | 545                 | 567                             | 2.0               | 1.0             | 6.389     | A                             |
| 2 - Hambledon Road (south) | 1250                  | 312                     | 364                       | 2291              | 0.545 | 1253                | 1128                            | 2.2               | 1.2             | 3.538     | A                             |
| 3 - Elettra Avenue         | 618                   | 154                     | 1063                      | 1814              | 0.340 | 619                 | 554                             | 0.9               | 0.5             | 3.024     | A                             |
| 4 - Hambledon Road (north) | 646                   | 162                     | 866                       | 1596              | 0.405 | 648                 | 816                             | 1.2               | 0.7             | 3.842     | A                             |

**12:30 - 12:45**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 453                   | 113                     | 792                       | 1221              | 0.371 | 455                 | 474                             | 1.0               | 0.6             | 4.832     | A                             |
| 2 - Hambledon Road (south) | 1046                  | 262                     | 304                       | 2337              | 0.448 | 1048                | 943                             | 1.2               | 0.8             | 2.838     | A                             |
| 3 - Elettra Avenue         | 517                   | 129                     | 889                       | 1947              | 0.266 | 518                 | 463                             | 0.5               | 0.4             | 2.526     | A                             |
| 4 - Hambledon Road (north) | 541                   | 135                     | 724                       | 1690              | 0.320 | 542                 | 682                             | 0.7               | 0.5             | 3.167     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev, PM

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 11.39              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 11.39             | B           |

## 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 |
|----|---------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D8 | 2026 Base + Com Dev + Dev | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 476                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1719                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 1002                    | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 790                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 302                        | 127                | 47                         |
|      | 2 - Hambledon Road (south) | 528             | 102                        | 381                | 708                        |
|      | 3 - Elettra Avenue         | 248             | 557                        | 0                  | 197                        |
|      | 4 - Hambledon Road (north) | 43              | 592                        | 120                | 35                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 3               | 2                          | 0                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 1                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 2               | 3                          | 1                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.68    | 15.21         | 2.2             | C       | 437                     | 655                           |
| 2 - Hambledon Road (south) | 0.83    | 9.08          | 4.7             | A       | 1577                    | 2366                          |
| 3 - Elettra Avenue         | 0.77    | 11.00         | 3.3             | B       | 919                     | 1379                          |
| 4 - Hambledon Road (north) | 0.78    | 14.58         | 3.4             | B       | 725                     | 1087                          |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 358                   | 90                      | 1054                      | 1063              | 0.337 | 356                 | 614                             | 0.0               | 0.5             | 5.210     | A                             |
| 2 - Hambledon Road (south) | 1294                  | 324                     | 246                       | 2382              | 0.543 | 1289                | 1164                            | 0.0               | 1.2             | 3.328     | A                             |
| 3 - Elettra Avenue         | 754                   | 189                     | 1065                      | 1813              | 0.416 | 752                 | 471                             | 0.0               | 0.7             | 3.410     | A                             |
| 4 - Hambledon Road (north) | 595                   | 149                     | 1076                      | 1456              | 0.409 | 592                 | 740                             | 0.0               | 0.7             | 4.259     | A                             |

#### 16:45 - 17:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 428                   | 107                     | 1261                      | 938               | 0.456 | 427                 | 735                             | 0.5               | 0.8             | 7.197     | A                             |
| 2 - Hambledon Road (south) | 1545                  | 386                     | 295                       | 2344              | 0.659 | 1542                | 1393                            | 1.2               | 1.9             | 4.537     | A                             |
| 3 - Elettra Avenue         | 901                   | 225                     | 1274                      | 1653              | 0.545 | 899                 | 563                             | 0.7               | 1.2             | 4.799     | A                             |
| 4 - Hambledon Road (north) | 710                   | 178                     | 1287                      | 1315              | 0.540 | 708                 | 885                             | 0.7               | 1.2             | 6.061     | A                             |

#### 17:00 - 17:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 524                   | 131                     | 1535                      | 773               | 0.678 | 519                 | 896                             | 0.8               | 2.1             | 14.300    | B                             |
| 2 - Hambledon Road (south) | 1893                  | 473                     | 359                       | 2295              | 0.825 | 1882                | 1696                            | 1.9               | 4.5             | 8.631     | A                             |
| 3 - Elettra Avenue         | 1103                  | 276                     | 1555                      | 1438              | 0.767 | 1095                | 687                             | 1.2               | 3.2             | 10.364    | B                             |
| 4 - Hambledon Road (north) | 870                   | 217                     | 1570                      | 1127              | 0.772 | 862                 | 1080                            | 1.2               | 3.3             | 13.498    | B                             |

#### 17:15 - 17:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 524                   | 131                     | 1547                      | 766               | 0.685 | 524                 | 901                             | 2.1               | 2.2             | 15.215    | C                             |
| 2 - Hambledon Road (south) | 1893                  | 473                     | 362                       | 2293              | 0.825 | 1892                | 1709                            | 4.5               | 4.7             | 9.081     | A                             |
| 3 - Elettra Avenue         | 1103                  | 276                     | 1563                      | 1431              | 0.771 | 1103                | 691                             | 3.2               | 3.3             | 11.004    | B                             |
| 4 - Hambledon Road (north) | 870                   | 217                     | 1579                      | 1121              | 0.776 | 869                 | 1086                            | 3.3               | 3.4             | 14.584    | B                             |

**17:30 - 17:45**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 428                   | 107                     | 1277                      | 928               | 0.461 | 433                 | 742                             | 2.2               | 0.9             | 7.530     | A                             |
| 2 - Hambledon Road (south) | 1545                  | 386                     | 299                       | 2341              | 0.660 | 1556                | 1411                            | 4.7               | 2.0             | 4.714     | A                             |
| 3 - Elettra Avenue         | 901                   | 225                     | 1286                      | 1644              | 0.548 | 909                 | 570                             | 3.3               | 1.2             | 4.990     | A                             |
| 4 - Hambledon Road (north) | 710                   | 178                     | 1301                      | 1306              | 0.544 | 719                 | 894                             | 3.4               | 1.2             | 6.370     | A                             |

**17:45 - 18:00**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 358                   | 90                      | 1062                      | 1059              | 0.339 | 360                 | 618                             | 0.9               | 0.5             | 5.297     | A                             |
| 2 - Hambledon Road (south) | 1294                  | 324                     | 249                       | 2380              | 0.544 | 1297                | 1173                            | 2.0               | 1.2             | 3.381     | A                             |
| 3 - Elettra Avenue         | 754                   | 189                     | 1072                      | 1808              | 0.417 | 756                 | 474                             | 1.2               | 0.7             | 3.456     | A                             |
| 4 - Hambledon Road (north) | 595                   | 149                     | 1083                      | 1451              | 0.410 | 597                 | 745                             | 1.2               | 0.7             | 4.331     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev, SAT

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 6.15               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 6.15              | 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 |
|----|---------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D9 | 2026 Base + Com Dev + Dev | SAT              | ONE HOUR             | 11:15              | 12:45               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 570                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1445                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 730                     | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 705                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 357                        | 147                | 66                         |
|      | 2 - Hambledon Road (south) | 394             | 27                         | 384                | 640                        |
|      | 3 - Elettra Avenue         | 179             | 402                        | 0                  | 149                        |
|      | 4 - Hambledon Road (north) | 25              | 521                        | 122                | 37                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |
|------|----------------------------|-----------------|----------------------------|--------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue |
|      | 1 - Milton road            | 0               | 4                          | 1                  |
|      | 2 - Hambledon Road (south) | 3               | 0                          | 1                  |
|      | 3 - Elettra Avenue         | 0               | 0                          | 0                  |
| From | 4 - Hambledon Road (north) | 4               | 1                          | 0                  |

## Results

### Results Summary for whole modelled period

| Am                         | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.65    | 11.02         | 1.9             | B       | 523                     | 785                           |
| 2 - Hambledon Road (south) | 0.71    | 5.49          | 2.4             | A       | 1326                    | 1989                          |
| 3 - Elettra Avenue         | 0.49    | 4.28          | 1.0             | A       | 670                     | 1005                          |
| 4 - Hambledon Road (north) | 0.54    | 5.49          | 1.2             | A       | 647                     | 970                           |

### Main Results for each time segment

#### 11:15 - 11:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 429                   | 107                     | 832                       | 1197              | 0.358 | 427                 | 449                             | 0.0               | 0.6             | 4.788     | A                             |
| 2 - Hambledon Road (south) | 1088                  | 272                     | 279                       | 2357              | 0.462 | 1084                | 980                             | 0.0               | 0.9             | 2.865     | A                             |
| 3 - Elettra Avenue         | 550                   | 137                     | 873                       | 1959              | 0.280 | 548                 | 490                             | 0.0               | 0.4             | 2.554     | A                             |
| 4 - Hambledon Road (north) | 531                   | 133                     | 752                       | 1672              | 0.318 | 529                 | 669                             | 0.0               | 0.5             | 3.172     | A                             |

#### 11:30 - 11:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 512                   | 128                     | 996                       | 1099              | 0.466 | 511                 | 537                             | 0.6               | 0.9             | 6.282     | A                             |
| 2 - Hambledon Road (south) | 1299                  | 325                     | 334                       | 2315              | 0.561 | 1297                | 1173                            | 0.9               | 1.3             | 3.586     | A                             |
| 3 - Elettra Avenue         | 656                   | 164                     | 1045                      | 1828              | 0.359 | 656                 | 586                             | 0.4               | 0.6             | 3.075     | A                             |
| 4 - Hambledon Road (north) | 634                   | 158                     | 900                       | 1573              | 0.403 | 633                 | 801                             | 0.5               | 0.7             | 3.859     | A                             |

#### 11:45 - 12:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 628                   | 157                     | 1218                      | 964               | 0.651 | 624                 | 657                             | 0.9               | 1.9             | 10.741    | B                             |
| 2 - Hambledon Road (south) | 1591                  | 398                     | 408                       | 2258              | 0.705 | 1587                | 1434                            | 1.3               | 2.4             | 5.409     | A                             |
| 3 - Elettra Avenue         | 804                   | 201                     | 1278                      | 1650              | 0.487 | 802                 | 716                             | 0.6               | 0.9             | 4.249     | A                             |
| 4 - Hambledon Road (north) | 776                   | 194                     | 1101                      | 1439              | 0.539 | 774                 | 979                             | 0.7               | 1.2             | 5.443     | A                             |

#### 12:00 - 12:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 628                   | 157                     | 1221                      | 963               | 0.652 | 627                 | 658                             | 1.9               | 1.9             | 11.023    | B                             |
| 2 - Hambledon Road (south) | 1591                  | 398                     | 410                       | 2256              | 0.705 | 1591                | 1439                            | 2.4               | 2.4             | 5.489     | A                             |
| 3 - Elettra Avenue         | 804                   | 201                     | 1281                      | 1647              | 0.488 | 804                 | 719                             | 0.9               | 1.0             | 4.278     | A                             |
| 4 - Hambledon Road (north) | 776                   | 194                     | 1103                      | 1438              | 0.540 | 776                 | 982                             | 1.2               | 1.2             | 5.488     | A                             |

**12:15 - 12:30**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 512                   | 128                     | 1000                      | 1096              | 0.468 | 516                 | 539                             | 1.9               | 0.9             | 6.420     | A                             |
| 2 - Hambledon Road (south) | 1299                  | 325                     | 336                       | 2313              | 0.562 | 1303                | 1180                            | 2.4               | 1.3             | 3.638     | A                             |
| 3 - Elettra Avenue         | 656                   | 164                     | 1050                      | 1824              | 0.360 | 658                 | 590                             | 1.0               | 0.6             | 3.098     | A                             |
| 4 - Hambledon Road (north) | 634                   | 158                     | 903                       | 1571              | 0.403 | 636                 | 805                             | 1.2               | 0.7             | 3.891     | A                             |

**12:30 - 12:45**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 429                   | 107                     | 836                       | 1195              | 0.359 | 430                 | 451                             | 0.9               | 0.6             | 4.846     | A                             |
| 2 - Hambledon Road (south) | 1088                  | 272                     | 281                       | 2355              | 0.462 | 1090                | 986                             | 1.3               | 0.9             | 2.890     | A                             |
| 3 - Elettra Avenue         | 550                   | 137                     | 878                       | 1956              | 0.281 | 550                 | 493                             | 0.6               | 0.4             | 2.566     | A                             |
| 4 - Hambledon Road (north) | 531                   | 133                     | 755                       | 1669              | 0.318 | 532                 | 673                             | 0.7               | 0.5             | 3.196     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev Sens, AM

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 10.56              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 10.56             | B           |

## 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 |
|-----|--------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D10 | 2026 Base + Com Dev + Dev Sens | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 608                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1511                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 611                     | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 1067                    | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 415                        | 102                | 91                         |
|      | 2 - Hambledon Road (south) | 339             | 43                         | 420                | 709                        |
|      | 3 - Elettra Avenue         | 113             | 303                        | 0                  | 195                        |
|      | 4 - Hambledon Road (north) | 46              | 796                        | 163                | 62                         |

## Vehicle Mix

## Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 10              | 0                          | 1                  | 6                          |
|      | 3 - Elettra Avenue         | 2               | 8                          | 0                  | 3                          |
|      | 4 - Hambledon Road (north) | 3               | 3                          | 3                  | 0                          |

## Results

### Results Summary for whole modelled period

| Am                         | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.85    | 29.08         | 5.1             | D       | 558                     | 837                           |
| 2 - Hambledon Road (south) | 0.75    | 6.83          | 3.1             | A       | 1387                    | 2080                          |
| 3 - Elettra Avenue         | 0.43    | 4.18          | 0.8             | A       | 561                     | 841                           |
| 4 - Hambledon Road (north) | 0.74    | 8.95          | 2.9             | A       | 979                     | 1469                          |

### Main Results for each time segment

#### 08:00 - 08:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 458                   | 114                     | 1025                      | 1081              | 0.424 | 455                 | 374                             | 0.0               | 0.7             | 5.886     | A                             |
| 2 - Hambledon Road (south) | 1138                  | 284                     | 313                       | 2331              | 0.488 | 1134                | 1167                            | 0.0               | 1.0             | 3.155     | A                             |
| 3 - Elettra Avenue         | 460                   | 115                     | 933                       | 1914              | 0.240 | 459                 | 514                             | 0.0               | 0.3             | 2.601     | A                             |
| 4 - Hambledon Road (north) | 803                   | 201                     | 599                       | 1774              | 0.453 | 800                 | 793                             | 0.0               | 0.8             | 3.790     | A                             |

#### 08:15 - 08:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 547                   | 137                     | 1227                      | 959               | 0.570 | 544                 | 447                             | 0.7               | 1.3             | 8.876     | A                             |
| 2 - Hambledon Road (south) | 1358                  | 340                     | 375                       | 2283              | 0.595 | 1356                | 1396                            | 1.0               | 1.5             | 4.078     | A                             |
| 3 - Elettra Avenue         | 549                   | 137                     | 1116                      | 1773              | 0.310 | 549                 | 615                             | 0.3               | 0.5             | 3.091     | A                             |
| 4 - Hambledon Road (north) | 959                   | 240                     | 716                       | 1695              | 0.566 | 957                 | 949                             | 0.8               | 1.3             | 5.003     | A                             |

#### 08:30 - 08:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 669                   | 167                     | 1499                      | 795               | 0.842 | 656                 | 546                             | 1.3               | 4.7             | 24.657    | C                             |
| 2 - Hambledon Road (south) | 1664                  | 416                     | 455                       | 2222              | 0.749 | 1658                | 1700                            | 1.5               | 3.0             | 6.645     | A                             |
| 3 - Elettra Avenue         | 673                   | 168                     | 1363                      | 1584              | 0.425 | 672                 | 749                             | 0.5               | 0.8             | 4.144     | A                             |
| 4 - Hambledon Road (north) | 1175                  | 294                     | 876                       | 1589              | 0.739 | 1169                | 1158                            | 1.3               | 2.8             | 8.691     | A                             |

#### 08:45 - 09:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 669                   | 167                     | 1505                      | 791               | 0.846 | 668                 | 548                             | 4.7               | 5.1             | 29.076    | D                             |
| 2 - Hambledon Road (south) | 1664                  | 416                     | 460                       | 2218              | 0.750 | 1663                | 1713                            | 3.0               | 3.1             | 6.826     | A                             |
| 3 - Elettra Avenue         | 673                   | 168                     | 1369                      | 1580              | 0.426 | 673                 | 754                             | 0.8               | 0.8             | 4.176     | A                             |
| 4 - Hambledon Road (north) | 1175                  | 294                     | 879                       | 1587              | 0.740 | 1175                | 1163                            | 2.8               | 2.9             | 8.954     | A                             |

**09:00 - 09:15**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 547                   | 137                     | 1235                      | 954               | 0.573 | 561                 | 450                             | 5.1               | 1.4             | 9.774     | A                             |
| 2 - Hambledon Road (south) | 1358                  | 340                     | 382                       | 2278              | 0.596 | 1365                | 1415                            | 3.1               | 1.6             | 4.175     | A                             |
| 3 - Elettra Avenue         | 549                   | 137                     | 1125                      | 1766              | 0.311 | 550                 | 621                             | 0.8               | 0.5             | 3.120     | A                             |
| 4 - Hambledon Road (north) | 959                   | 240                     | 720                       | 1693              | 0.567 | 965                 | 956                             | 2.9               | 1.4             | 5.128     | A                             |

**09:15 - 09:30**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 458                   | 114                     | 1031                      | 1077              | 0.425 | 460                 | 376                             | 1.4               | 0.8             | 6.028     | A                             |
| 2 - Hambledon Road (south) | 1138                  | 284                     | 316                       | 2328              | 0.489 | 1140                | 1176                            | 1.6               | 1.0             | 3.192     | A                             |
| 3 - Elettra Avenue         | 460                   | 115                     | 939                       | 1909              | 0.241 | 461                 | 517                             | 0.5               | 0.3             | 2.615     | A                             |
| 4 - Hambledon Road (north) | 803                   | 201                     | 602                       | 1772              | 0.453 | 805                 | 797                             | 1.4               | 0.9             | 3.840     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev Sens, PM

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 11.49              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 11.49             | B           |

## 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 |
|-----|--------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D11 | 2026 Base + Com Dev + Dev Sens | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 476                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1689                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 1002                    | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 820                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 302                        | 127                | 47                         |
|      | 2 - Hambledon Road (south) | 528             | 102                        | 351                | 708                        |
|      | 3 - Elettra Avenue         | 248             | 527                        | 0                  | 227                        |
|      | 4 - Hambledon Road (north) | 43              | 592                        | 150                | 35                         |

## Vehicle Mix

## Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 3               | 2                          | 0                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 1                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 2               | 3                          | 1                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.68    | 15.21         | 2.2             | C       | 437                     | 655                           |
| 2 - Hambledon Road (south) | 0.82    | 8.92          | 4.5             | A       | 1550                    | 2325                          |
| 3 - Elettra Avenue         | 0.77    | 11.00         | 3.3             | B       | 919                     | 1379                          |
| 4 - Hambledon Road (north) | 0.79    | 15.22         | 3.7             | C       | 752                     | 1129                          |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 358                   | 90                      | 1054                      | 1063              | 0.337 | 356                 | 614                             | 0.0               | 0.5             | 5.209     | A                             |
| 2 - Hambledon Road (south) | 1272                  | 318                     | 269                       | 2364              | 0.538 | 1267                | 1141                            | 0.0               | 1.2             | 3.315     | A                             |
| 3 - Elettra Avenue         | 754                   | 189                     | 1065                      | 1813              | 0.416 | 752                 | 471                             | 0.0               | 0.7             | 3.410     | A                             |
| 4 - Hambledon Road (north) | 617                   | 154                     | 1054                      | 1471              | 0.420 | 614                 | 763                             | 0.0               | 0.7             | 4.293     | A                             |

#### 16:45 - 17:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 428                   | 107                     | 1261                      | 938               | 0.456 | 427                 | 735                             | 0.5               | 0.8             | 7.196     | A                             |
| 2 - Hambledon Road (south) | 1518                  | 380                     | 322                       | 2324              | 0.653 | 1516                | 1366                            | 1.2               | 1.9             | 4.503     | A                             |
| 3 - Elettra Avenue         | 901                   | 225                     | 1274                      | 1653              | 0.545 | 899                 | 563                             | 0.7               | 1.2             | 4.799     | A                             |
| 4 - Hambledon Road (north) | 737                   | 184                     | 1261                      | 1333              | 0.553 | 735                 | 912                             | 0.7               | 1.2             | 6.147     | A                             |

#### 17:00 - 17:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 524                   | 131                     | 1535                      | 773               | 0.678 | 519                 | 896                             | 0.8               | 2.1             | 14.283    | B                             |
| 2 - Hambledon Road (south) | 1860                  | 465                     | 391                       | 2270              | 0.819 | 1850                | 1663                            | 1.9               | 4.4             | 8.490     | A                             |
| 3 - Elettra Avenue         | 1103                  | 276                     | 1555                      | 1438              | 0.767 | 1095                | 686                             | 1.2               | 3.2             | 10.366    | B                             |
| 4 - Hambledon Road (north) | 903                   | 226                     | 1537                      | 1149              | 0.786 | 894                 | 1113                            | 1.2               | 3.5             | 13.994    | B                             |

#### 17:15 - 17:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 524                   | 131                     | 1547                      | 766               | 0.684 | 524                 | 901                             | 2.1               | 2.2             | 15.212    | C                             |
| 2 - Hambledon Road (south) | 1860                  | 465                     | 395                       | 2268              | 0.820 | 1859                | 1676                            | 4.4               | 4.5             | 8.915     | A                             |
| 3 - Elettra Avenue         | 1103                  | 276                     | 1563                      | 1431              | 0.771 | 1103                | 691                             | 3.2               | 3.3             | 11.005    | B                             |
| 4 - Hambledon Road (north) | 903                   | 226                     | 1546                      | 1143              | 0.790 | 902                 | 1119                            | 3.5               | 3.7             | 15.224    | C                             |

**17:30 - 17:45**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 428                   | 107                     | 1278                      | 928               | 0.461 | 433                 | 742                             | 2.2               | 0.9             | 7.532     | A                             |
| 2 - Hambledon Road (south) | 1518                  | 380                     | 327                       | 2320              | 0.654 | 1529                | 1384                            | 4.5               | 1.9             | 4.674     | A                             |
| 3 - Elettra Avenue         | 901                   | 225                     | 1286                      | 1644              | 0.548 | 909                 | 570                             | 3.3               | 1.2             | 4.989     | A                             |
| 4 - Hambledon Road (north) | 737                   | 184                     | 1273                      | 1325              | 0.557 | 747                 | 921                             | 3.7               | 1.3             | 6.486     | A                             |

**17:45 - 18:00**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 358                   | 90                      | 1062                      | 1059              | 0.339 | 360                 | 618                             | 0.9               | 0.5             | 5.296     | A                             |
| 2 - Hambledon Road (south) | 1272                  | 318                     | 271                       | 2363              | 0.538 | 1275                | 1150                            | 1.9               | 1.2             | 3.365     | A                             |
| 3 - Elettra Avenue         | 754                   | 189                     | 1072                      | 1808              | 0.417 | 756                 | 474                             | 1.2               | 0.7             | 3.456     | A                             |
| 4 - Hambledon Road (north) | 617                   | 154                     | 1060                      | 1466              | 0.421 | 620                 | 768                             | 1.3               | 0.8             | 4.366     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev Sens, SAT

## Data Errors and Warnings

| Severity | Area     | Item                                     | Description                                                                                                      |
|----------|----------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 6.14               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 6.14              | 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 |
|-----|--------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D12 | 2026 Base + Com Dev + Dev Sens | SAT              | ONE HOUR             | 11:15              | 12:45               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 570                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1415                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 730                     | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 735                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 357                        | 147                | 66                         |
|      | 2 - Hambledon Road (south) | 394             | 27                         | 354                | 640                        |
|      | 3 - Elettra Avenue         | 179             | 372                        | 0                  | 179                        |
|      | 4 - Hambledon Road (north) | 25              | 521                        | 152                | 37                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|      | 1 - Milton road            | 0               | 4                          | 1                  | 0                          |
|      | 2 - Hambledon Road (south) | 3               | 0                          | 1                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 0                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 4               | 1                          | 0                  | 0                          |

## Results

### Results Summary for whole modelled period

| Am                         | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.65    | 11.02         | 1.9             | B       | 523                     | 785                           |
| 2 - Hambledon Road (south) | 0.70    | 5.43          | 2.3             | A       | 1298                    | 1948                          |
| 3 - Elettra Avenue         | 0.49    | 4.28          | 1.0             | A       | 670                     | 1005                          |
| 4 - Hambledon Road (north) | 0.55    | 5.58          | 1.2             | A       | 674                     | 1012                          |

### Main Results for each time segment

#### 11:15 - 11:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 429                   | 107                     | 832                       | 1197              | 0.358 | 427                 | 449                             | 0.0               | 0.6             | 4.788     | A                             |
| 2 - Hambledon Road (south) | 1065                  | 266                     | 301                       | 2340              | 0.455 | 1062                | 958                             | 0.0               | 0.8             | 2.854     | A                             |
| 3 - Elettra Avenue         | 550                   | 137                     | 873                       | 1959              | 0.280 | 548                 | 490                             | 0.0               | 0.4             | 2.555     | A                             |
| 4 - Hambledon Road (north) | 553                   | 138                     | 730                       | 1687              | 0.328 | 551                 | 692                             | 0.0               | 0.5             | 3.192     | A                             |

#### 11:30 - 11:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 512                   | 128                     | 996                       | 1099              | 0.466 | 511                 | 537                             | 0.6               | 0.9             | 6.282     | A                             |
| 2 - Hambledon Road (south) | 1272                  | 318                     | 361                       | 2294              | 0.555 | 1270                | 1146                            | 0.8               | 1.3             | 3.564     | A                             |
| 3 - Elettra Avenue         | 656                   | 164                     | 1045                      | 1828              | 0.359 | 656                 | 586                             | 0.4               | 0.6             | 3.076     | A                             |
| 4 - Hambledon Road (north) | 661                   | 165                     | 873                       | 1591              | 0.415 | 660                 | 828                             | 0.5               | 0.7             | 3.895     | A                             |

#### 11:45 - 12:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 628                   | 157                     | 1218                      | 964               | 0.651 | 624                 | 657                             | 0.9               | 1.9             | 10.740    | B                             |
| 2 - Hambledon Road (south) | 1558                  | 389                     | 441                       | 2232              | 0.698 | 1554                | 1401                            | 1.3               | 2.3             | 5.352     | A                             |
| 3 - Elettra Avenue         | 804                   | 201                     | 1278                      | 1650              | 0.487 | 802                 | 716                             | 0.6               | 0.9             | 4.251     | A                             |
| 4 - Hambledon Road (north) | 809                   | 202                     | 1068                      | 1461              | 0.554 | 807                 | 1012                            | 0.7               | 1.2             | 5.531     | A                             |

#### 12:00 - 12:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 628                   | 157                     | 1221                      | 963               | 0.652 | 627                 | 658                             | 1.9               | 1.9             | 11.023    | B                             |
| 2 - Hambledon Road (south) | 1558                  | 389                     | 443                       | 2231              | 0.698 | 1558                | 1406                            | 2.3               | 2.3             | 5.428     | A                             |
| 3 - Elettra Avenue         | 804                   | 201                     | 1281                      | 1647              | 0.488 | 804                 | 719                             | 0.9               | 1.0             | 4.280     | A                             |
| 4 - Hambledon Road (north) | 809                   | 202                     | 1070                      | 1460              | 0.554 | 809                 | 1015                            | 1.2               | 1.2             | 5.579     | A                             |

**12:15 - 12:30**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 512                   | 128                     | 1000                      | 1096              | 0.468 | 516                 | 539                             | 1.9               | 0.9             | 6.421     | A                             |
| 2 - Hambledon Road (south) | 1272                  | 318                     | 363                       | 2292              | 0.555 | 1276                | 1153                            | 2.3               | 1.3             | 3.612     | A                             |
| 3 - Elettra Avenue         | 656                   | 164                     | 1050                      | 1824              | 0.360 | 658                 | 590                             | 1.0               | 0.6             | 3.097     | A                             |
| 4 - Hambledon Road (north) | 661                   | 165                     | 876                       | 1589              | 0.416 | 663                 | 832                             | 1.2               | 0.7             | 3.928     | A                             |

**12:30 - 12:45**

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 429                   | 107                     | 836                       | 1195              | 0.359 | 430                 | 451                             | 0.9               | 0.6             | 4.846     | A                             |
| 2 - Hambledon Road (south) | 1065                  | 266                     | 303                       | 2338              | 0.456 | 1067                | 963                             | 1.3               | 0.9             | 2.879     | A                             |
| 3 - Elettra Avenue         | 550                   | 137                     | 878                       | 1956              | 0.281 | 550                 | 493                             | 0.6               | 0.4             | 2.569     | A                             |
| 4 - Hambledon Road (north) | 553                   | 138                     | 733                       | 1684              | 0.329 | 554                 | 695                             | 0.7               | 0.5             | 3.214     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev, AM DIRECT

## Data Errors and Warnings

| Severity | Area        | Item                                     | Description                                                                                                                                                                                  |
|----------|-------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry    | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                             |
| Warning  | Vehicle Mix |                                          | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 9.54               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 9.54              | A           |

## Traffic Demand

### Demand Set Details

| ID  | Scenario name             | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|---------------------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D13 | 2026 Base + Com Dev + Dev | AM DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) | O-D data varies over time |
|------------------------------|-------------------------------|--------------------|---------------------------|---------------------------|
| ✓                            | ✓                             | HV Percentages     | 2.00                      | ✓                         |

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|--------------------|
| 1 - Milton road            |            | DIRECT       | ✓            | 100.000            |
| 2 - Hambledon Road (south) |            | DIRECT       | ✓            | 100.000            |
| 3 - Elettra Avenue         |            | DIRECT       | ✓            | 100.000            |
| 4 - Hambledon Road (north) |            | DIRECT       | ✓            | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

07:30 -  
07:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 425                        | 125                | 83                         |
|      | 2 - Hambledon Road (south) | 215             | 8                          | 402                | 533                        |
|      | 3 - Elettra Avenue         | 103             | 297                        | 0                  | 141                        |
|      | 4 - Hambledon Road (north) | 21              | 739                        | 115                | 29                         |

### Demand (PCU/hr)

07:45 -  
08:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 463                        | 199                | 46                         |
|      | 2 - Hambledon Road (south) | 319             | 29                         | 439                | 628                        |
|      | 3 - Elettra Avenue         | 107             | 277                        | 0                  | 187                        |
|      | 4 - Hambledon Road (north) | 25              | 718                        | 123                | 25                         |

### Demand (PCU/hr)

08:00 -  
08:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 475                        | 174                | 108                        |
|      | 2 - Hambledon Road (south) | 327             | 4                          | 481                | 570                        |
|      | 3 - Elettra Avenue         | 194             | 297                        | 0                  | 116                        |
|      | 4 - Hambledon Road (north) | 37              | 772                        | 115                | 50                         |

### Demand (PCU/hr)

08:15 -  
08:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 409                        | 150                | 124                        |
|      | 2 - Hambledon Road (south) | 298             | 37                         | 274                | 632                        |
|      | 3 - Elettra Avenue         | 115             | 388                        | 0                  | 178                        |
|      | 4 - Hambledon Road (north) | 50              | 776                        | 152                | 70                         |

### Demand (PCU/hr)

08:30 -  
08:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 463                        | 166                | 74                         |
|      | 2 - Hambledon Road (south) | 315             | 50                         | 493                | 723                        |
|      | 3 - Elettra Avenue         | 140             | 339                        | 0                  | 174                        |
|      | 4 - Hambledon Road (north) | 41              | 697                        | 160                | 50                         |

### Demand (PCU/hr)

08:45 -  
09:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 425                        | 137                | 79                         |
|      | 2 - Hambledon Road (south) | 389             | 41                         | 622                | 707                        |
|      | 3 - Elettra Avenue         | 140             | 355                        | 0                  | 191                        |
|      | 4 - Hambledon Road (north) | 46              | 896                        | 152                | 41                         |

### Demand (PCU/hr)

09:00 -  
09:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 363                        | 121                | 87                         |
|      | 2 - Hambledon Road (south) | 356             | 46                         | 568                | 773                        |
|      | 3 - Elettra Avenue         | 173             | 438                        | 0                  | 166                        |
|      | 4 - Hambledon Road (north) | 46              | 813                        | 57                 | 87                         |

### Demand (PCU/hr)

09:15 -  
09:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 351                        | 154                | 29                         |
|      | 2 - Hambledon Road (south) | 364             | 50                         | 402                | 649                        |
|      | 3 - Elettra Avenue         | 173             | 430                        | 0                  | 207                        |
|      | 4 - Hambledon Road (north) | 41              | 652                        | 156                | 50                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 0                          | 0                  | 0                          |
|      | 2 - Hambledon Road (south) | 0               | 0                          | 0                  | 0                          |
|      | 3 - Elettra Avenue         | 0               | 0                          | 0                  | 0                          |
|      | 4 - Hambledon Road (north) | 0               | 0                          | 0                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.81    | 22.03         | 4.0             | C       | 654                     | 1308                          |
| 2 - Hambledon Road (south) | 0.78    | 7.11          | 3.4             | A       | 1468                    | 2936                          |
| 3 - Elettra Avenue         | 0.49    | 4.39          | 0.9             | A       | 666                     | 1332                          |
| 4 - Hambledon Road (north) | 0.73    | 8.34          | 2.6             | A       | 975                     | 1951                          |

### Main Results for each time segment

#### 07:30 - 07:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 633                   | 158                     | 1183                      | 985               | 0.642 | 626                 | 338                             | 0.0               | 1.7             | 9.836     | A                             |
| 2 - Hambledon Road (south) | 1158                  | 290                     | 349                       | 2303              | 0.503 | 1154                | 1460                            | 0.0               | 1.0             | 3.124     | A                             |
| 3 - Elettra Avenue         | 541                   | 135                     | 864                       | 1966              | 0.275 | 539                 | 639                             | 0.0               | 0.4             | 2.521     | A                             |
| 4 - Hambledon Road (north) | 904                   | 226                     | 621                       | 1759              | 0.514 | 900                 | 783                             | 0.0               | 1.0             | 4.172     | A                             |

#### 07:45 - 08:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 708                   | 177                     | 1172                      | 992               | 0.713 | 705                 | 450                             | 1.7               | 2.4             | 12.422    | B                             |
| 2 - Hambledon Road (south) | 1415                  | 354                     | 392                       | 2270              | 0.623 | 1412                | 1485                            | 1.0               | 1.6             | 4.186     | A                             |
| 3 - Elettra Avenue         | 571                   | 143                     | 1045                      | 1828              | 0.312 | 571                 | 759                             | 0.4               | 0.5             | 2.864     | A                             |
| 4 - Hambledon Road (north) | 891                   | 223                     | 731                       | 1686              | 0.529 | 891                 | 885                             | 1.0               | 1.1             | 4.528     | A                             |

#### 08:00 - 08:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 757                   | 189                     | 1237                      | 953               | 0.794 | 752                 | 558                             | 2.4               | 3.6             | 17.475    | C                             |
| 2 - Hambledon Road (south) | 1382                  | 346                     | 445                       | 2229              | 0.620 | 1382                | 1544                            | 1.6               | 1.6             | 4.250     | A                             |
| 3 - Elettra Avenue         | 607                   | 152                     | 1058                      | 1818              | 0.334 | 607                 | 769                             | 0.5               | 0.5             | 2.971     | A                             |
| 4 - Hambledon Road (north) | 974                   | 244                     | 822                       | 1625              | 0.599 | 973                 | 843                             | 1.1               | 1.5             | 5.503     | A                             |

### 08:15 - 08:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 683                   | 171                     | 1421                      | 842               | 0.811 | 681                 | 463                             | 3.6               | 4.0             | 22.031    | C                             |
| 2 - Hambledon Road (south) | 1241                  | 310                     | 494                       | 2191              | 0.566 | 1242                | 1608                            | 1.6               | 1.3             | 3.798     | A                             |
| 3 - Elettra Avenue         | 681                   | 170                     | 1160                      | 1740              | 0.391 | 680                 | 577                             | 0.5               | 0.6             | 3.396     | A                             |
| 4 - Hambledon Road (north) | 1048                  | 262                     | 838                       | 1614              | 0.649 | 1047                | 1003                            | 1.5               | 1.8             | 6.322     | A                             |

### 08:30 - 08:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 703                   | 176                     | 1297                      | 916               | 0.767 | 705                 | 495                             | 4.0               | 3.5             | 17.251    | C                             |
| 2 - Hambledon Road (south) | 1581                  | 395                     | 452                       | 2224              | 0.711 | 1577                | 1550                            | 1.3               | 2.4             | 5.525     | A                             |
| 3 - Elettra Avenue         | 653                   | 163                     | 1211                      | 1701              | 0.384 | 653                 | 817                             | 0.6               | 0.6             | 3.438     | A                             |
| 4 - Hambledon Road (north) | 948                   | 237                     | 843                       | 1611              | 0.589 | 949                 | 1021                            | 1.8               | 1.5             | 5.457     | A                             |

### 08:45 - 09:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 641                   | 160                     | 1480                      | 806               | 0.795 | 640                 | 574                             | 3.5               | 3.7             | 21.489    | C                             |
| 2 - Hambledon Road (south) | 1759                  | 440                     | 408                       | 2257              | 0.779 | 1755                | 1712                            | 2.4               | 3.4             | 7.105     | A                             |
| 3 - Elettra Avenue         | 686                   | 172                     | 1254                      | 1668              | 0.411 | 686                 | 909                             | 0.6               | 0.7             | 3.666     | A                             |
| 4 - Hambledon Road (north) | 1135                  | 284                     | 924                       | 1557              | 0.729 | 1130                | 1016                            | 1.5               | 2.6             | 8.344     | A                             |

### 09:00 - 09:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 571                   | 143                     | 1442                      | 829               | 0.689 | 576                 | 575                             | 3.7               | 2.3             | 14.558    | B                             |
| 2 - Hambledon Road (south) | 1743                  | 436                     | 354                       | 2299              | 0.758 | 1744                | 1665                            | 3.4               | 3.2             | 6.502     | A                             |
| 3 - Elettra Avenue         | 777                   | 194                     | 1349                      | 1595              | 0.487 | 776                 | 749                             | 0.7               | 0.9             | 4.390     | A                             |
| 4 - Hambledon Road (north) | 1003                  | 251                     | 1012                      | 1498              | 0.669 | 1005                | 1113                            | 2.6               | 2.1             | 7.334     | A                             |

### 09:15 - 09:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 534                   | 134                     | 1340                      | 890               | 0.600 | 537                 | 579                             | 2.3               | 1.5             | 10.277    | B                             |
| 2 - Hambledon Road (south) | 1465                  | 366                     | 390                       | 2271              | 0.645 | 1470                | 1487                            | 3.2               | 1.8             | 4.526     | A                             |
| 3 - Elettra Avenue         | 810                   | 203                     | 1147                      | 1750              | 0.463 | 810                 | 714                             | 0.9               | 0.9             | 3.834     | A                             |
| 4 - Hambledon Road (north) | 899                   | 225                     | 1018                      | 1494              | 0.602 | 901                 | 939                             | 2.1               | 1.5             | 6.090     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev, AM DIRECT

## Data Errors and Warnings

| Severity | Area        | Item                                     | Description                                                                                                                                                                                  |
|----------|-------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry    | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                             |
| Warning  | Vehicle Mix |                                          | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 7.58               | A            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 7.58              | A           |

## Traffic Demand

### Demand Set Details

| ID  | Scenario name       | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D14 | 2026 Base + Com Dev | AM DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) | O-D data varies over time |
|------------------------------|-------------------------------|--------------------|---------------------------|---------------------------|
| ✓                            | ✓                             | HV Percentages     | 2.00                      | ✓                         |

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|--------------------|
| 1 - Milton road            |            | DIRECT       | ✓            | 100.000            |
| 2 - Hambledon Road (south) |            | DIRECT       | ✓            | 100.000            |
| 3 - Elettra Avenue         |            | DIRECT       | ✓            | 100.000            |
| 4 - Hambledon Road (north) |            | DIRECT       | ✓            | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

07:30 -  
07:45

|      |                            | To              |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 430                        | 104                | 83                         |
|      | 2 - Hambledon Road (south) | 219             | 8                          | 288                | 534                        |
|      | 3 - Elettra Avenue         | 90              | 225                        | 0                  | 131                        |
|      | 4 - Hambledon Road (north) | 21              | 741                        | 97                 | 29                         |

### Demand (PCU/hr)

07:45 -  
08:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 468                        | 178                | 46                         |
|      | 2 - Hambledon Road (south) | 323             | 29                         | 325                | 629                        |
|      | 3 - Elettra Avenue         | 94              | 204                        | 0                  | 177                        |
|      | 4 - Hambledon Road (north) | 25              | 720                        | 106                | 25                         |

### Demand (PCU/hr)

08:00 -  
08:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 480                        | 153                | 108                        |
|      | 2 - Hambledon Road (south) | 331             | 4                          | 367                | 571                        |
|      | 3 - Elettra Avenue         | 181             | 225                        | 0                  | 106                        |
|      | 4 - Hambledon Road (north) | 37              | 774                        | 97                 | 50                         |

### Demand (PCU/hr)

08:15 -  
08:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 414                        | 128                | 124                        |
|      | 2 - Hambledon Road (south) | 302             | 37                         | 160                | 633                        |
|      | 3 - Elettra Avenue         | 102             | 316                        | 0                  | 168                        |
|      | 4 - Hambledon Road (north) | 50              | 778                        | 135                | 70                         |

### Demand (PCU/hr)

08:30 -  
08:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 468                        | 145                | 74                         |
|      | 2 - Hambledon Road (south) | 319             | 50                         | 379                | 724                        |
|      | 3 - Elettra Avenue         | 127             | 266                        | 0                  | 164                        |
|      | 4 - Hambledon Road (north) | 41              | 699                        | 143                | 50                         |

### Demand (PCU/hr)

08:45 -  
09:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 430                        | 116                | 79                         |
|      | 2 - Hambledon Road (south) | 393             | 41                         | 507                | 708                        |
|      | 3 - Elettra Avenue         | 127             | 283                        | 0                  | 181                        |
|      | 4 - Hambledon Road (north) | 46              | 898                        | 135                | 41                         |

### Demand (PCU/hr)

09:00 -  
09:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 368                        | 99                 | 87                         |
|      | 2 - Hambledon Road (south) | 360             | 46                         | 454                | 774                        |
|      | 3 - Elettra Avenue         | 160             | 365                        | 0                  | 156                        |
|      | 4 - Hambledon Road (north) | 46              | 815                        | 40                 | 87                         |

### Demand (PCU/hr)

09:15 -  
09:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 351                        | 154                | 29                         |
|      | 2 - Hambledon Road (south) | 364             | 50                         | 402                | 649                        |
|      | 3 - Elettra Avenue         | 173             | 430                        | 0                  | 207                        |
|      | 4 - Hambledon Road (north) | 41              | 652                        | 156                | 0                          |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 0                          | 0                  | 0                          |
|      | 2 - Hambledon Road (south) | 0               | 0                          | 0                  | 0                          |
|      | 3 - Elettra Avenue         | 0               | 0                          | 0                  | 0                          |
|      | 4 - Hambledon Road (north) | 0               | 0                          | 0                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max RFC | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 0.74    | 15.66         | 2.8             | C       | 640                     | 1279                          |
| 2 - Hambledon Road (south) | 0.72    | 5.60          | 2.5             | A       | 1373                    | 2745                          |
| 3 - Elettra Avenue         | 0.45    | 3.95          | 0.8             | A       | 582                     | 1165                          |
| 4 - Hambledon Road (north) | 0.70    | 7.22          | 2.2             | A       | 956                     | 1911                          |

### Main Results for each time segment

#### 07:30 - 07:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 617                   | 154                     | 1096                      | 1038              | 0.594 | 611                 | 329                             | 0.0               | 1.4             | 8.326     | A                             |
| 2 - Hambledon Road (south) | 1049                  | 262                     | 311                       | 2332              | 0.450 | 1046                | 1396                            | 0.0               | 0.8             | 2.791     | A                             |
| 3 - Elettra Avenue         | 446                   | 112                     | 870                       | 1962              | 0.227 | 445                 | 487                             | 0.0               | 0.3             | 2.372     | A                             |
| 4 - Hambledon Road (north) | 888                   | 222                     | 540                       | 1812              | 0.490 | 884                 | 774                             | 0.0               | 1.0             | 3.863     | A                             |

#### 07:45 - 08:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 692                   | 173                     | 1084                      | 1045              | 0.662 | 690                 | 441                             | 1.4               | 1.9             | 10.074    | B                             |
| 2 - Hambledon Road (south) | 1306                  | 327                     | 354                       | 2299              | 0.568 | 1304                | 1420                            | 0.8               | 1.3             | 3.610     | A                             |
| 3 - Elettra Avenue         | 475                   | 119                     | 1051                      | 1824              | 0.260 | 475                 | 608                             | 0.3               | 0.4             | 2.668     | A                             |
| 4 - Hambledon Road (north) | 876                   | 219                     | 649                       | 1740              | 0.503 | 876                 | 876                             | 1.0               | 1.0             | 4.164     | A                             |

#### 08:00 - 08:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 741                   | 185                     | 1149                      | 1006              | 0.737 | 738                 | 549                             | 1.9               | 2.7             | 13.259    | B                             |
| 2 - Hambledon Road (south) | 1273                  | 318                     | 407                       | 2259              | 0.564 | 1273                | 1480                            | 1.3               | 1.3             | 3.654     | A                             |
| 3 - Elettra Avenue         | 512                   | 128                     | 1063                      | 1814              | 0.282 | 512                 | 617                             | 0.4               | 0.4             | 2.764     | A                             |
| 4 - Hambledon Road (north) | 958                   | 240                     | 741                       | 1679              | 0.571 | 957                 | 834                             | 1.0               | 1.3             | 4.976     | A                             |

### 08:15 - 08:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 666                   | 167                     | 1334                      | 894               | 0.745 | 665                 | 454                             | 2.7               | 2.8             | 15.660    | C                             |
| 2 - Hambledon Road (south) | 1132                  | 283                     | 456                       | 2221              | 0.510 | 1133                | 1544                            | 1.3               | 1.0             | 3.312     | A                             |
| 3 - Elettra Avenue         | 586                   | 147                     | 1165                      | 1736              | 0.338 | 586                 | 424                             | 0.4               | 0.5             | 3.127     | A                             |
| 4 - Hambledon Road (north) | 1033                  | 258                     | 757                       | 1668              | 0.619 | 1032                | 994                             | 1.3               | 1.6             | 5.645     | A                             |

### 08:30 - 08:45

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 687                   | 172                     | 1209                      | 970               | 0.709 | 688                 | 486                             | 2.8               | 2.5             | 12.860    | B                             |
| 2 - Hambledon Road (south) | 1472                  | 368                     | 413                       | 2253              | 0.653 | 1469                | 1484                            | 1.0               | 1.9             | 4.568     | A                             |
| 3 - Elettra Avenue         | 557                   | 139                     | 1216                      | 1697              | 0.328 | 557                 | 666                             | 0.5               | 0.5             | 3.160     | A                             |
| 4 - Hambledon Road (north) | 933                   | 233                     | 761                       | 1665              | 0.560 | 934                 | 1012                            | 1.6               | 1.3             | 4.932     | A                             |

### 08:45 - 09:00

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 625                   | 156                     | 1394                      | 858               | 0.729 | 625                 | 565                             | 2.5               | 2.6             | 15.380    | C                             |
| 2 - Hambledon Road (south) | 1649                  | 412                     | 371                       | 2286              | 0.721 | 1646                | 1648                            | 1.9               | 2.5             | 5.600     | A                             |
| 3 - Elettra Avenue         | 591                   | 148                     | 1260                      | 1663              | 0.355 | 591                 | 757                             | 0.5               | 0.5             | 3.356     | A                             |
| 4 - Hambledon Road (north) | 1120                  | 280                     | 843                       | 1611              | 0.695 | 1116                | 1008                            | 1.3               | 2.2             | 7.222     | A                             |

### 09:00 - 09:15

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 554                   | 139                     | 1354                      | 882               | 0.628 | 557                 | 566                             | 2.6               | 1.7             | 11.206    | B                             |
| 2 - Hambledon Road (south) | 1634                  | 409                     | 314                       | 2329              | 0.701 | 1635                | 1597                            | 2.5               | 2.4             | 5.188     | A                             |
| 3 - Elettra Avenue         | 681                   | 170                     | 1354                      | 1591              | 0.428 | 680                 | 595                             | 0.5               | 0.7             | 3.948     | A                             |
| 4 - Hambledon Road (north) | 988                   | 247                     | 931                       | 1553              | 0.636 | 990                 | 1104                            | 2.2               | 1.8             | 6.418     | A                             |

### 09:15 - 09:30

| Am                         | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|-------------------|-------|---------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 534                   | 134                     | 1290                      | 921               | 0.580 | 535                 | 578                             | 1.7               | 1.4             | 9.367     | A                             |
| 2 - Hambledon Road (south) | 1465                  | 366                     | 339                       | 2310              | 0.634 | 1468                | 1486                            | 2.4               | 1.8             | 4.286     | A                             |
| 3 - Elettra Avenue         | 810                   | 203                     | 1095                      | 1790              | 0.453 | 810                 | 712                             | 0.7               | 0.8             | 3.674     | A                             |
| 4 - Hambledon Road (north) | 849                   | 212                     | 1017                      | 1495              | 0.568 | 851                 | 888                             | 1.8               | 1.3             | 5.605     | A                             |



## Appendix D

TRL Junctions Report:

Proposed Geometry – Entry Sim

Baseline Traffic; Baseline + Outline Application; and, Baseline + Outline & Net Development

| Junctions 10                                                                                                                                                     |  |  |  |  |  |  |  |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| ARCADY 10 - Roundabout Module                                                                                                                                    |  |  |  |  |  |  |  |  |  |
| Version: 10.0.2.1574<br>© Copyright TRL Software Limited, 2021                                                                                                   |  |  |  |  |  |  |  |  |  |
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| 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: Hambledon Road\_Milton Road\_Elettra Av Mit (2021) Entry Sim (RevB).j10

Path: P:\19000's\19235\Technical\FINAL

Report generation date: 01/12/2021 14:42:30

»(Default Analysis Set) - 2026 Base + Com Dev, PM  
 »(Default Analysis Set) - 2026 Base + Com Dev, SAT  
 »(Default Analysis Set) - 2026 Base + Com Dev + Dev, PM  
 »(Default Analysis Set) - 2026 Base + Com Dev + Dev, SAT  
 »(Default Analysis Set) - 2026 Base + Com Dev + Dev Sens, AM  
 »(Default Analysis Set) - 2026 Base + Com Dev + Dev Sens, PM  
 »(Default Analysis Set) - 2026 Base + Com Dev + Dev Sens, SAT  
 »(Default Analysis Set) - 2026 Base + Com Dev + Dev, AM DIRECT  
 »(Default Analysis Set) - 2026 Base + Com Dev, AM DIRECT

### Summary of junction performance

|                            | PM                                                    |             |           |     |     | SAT    |             |           |     |     | AM     |             |           |     |     | AM DIRECT |             |           |     |     |
|----------------------------|-------------------------------------------------------|-------------|-----------|-----|-----|--------|-------------|-----------|-----|-----|--------|-------------|-----------|-----|-----|-----------|-------------|-----------|-----|-----|
|                            | Set ID                                                | Queue (PCU) | Delay (s) | RFC | LOS | Set ID | Queue (PCU) | Delay (s) | RFC | LOS | Set ID | Queue (PCU) | Delay (s) | RFC | LOS | Set ID    | Queue (PCU) | Delay (s) | RFC | LOS |
|                            | A1 [Lane Simulation] - 2026 Base + Com Dev            |             |           |     |     |        |             |           |     |     |        |             |           |     |     |           |             |           |     |     |
| 1 - Milton road            | D5                                                    | 4.2         | 27.22     |     | D   | D6     | 5.0         | 24.10     |     | C   |        |             |           |     |     | D14       | 7.0         | 34.07     |     | D   |
| 2 - Hambledon Road (south) |                                                       | 7.2         | 12.56     |     | B   |        | 3.3         | 7.83      |     | A   |        |             |           |     |     |           | 4.1         | 8.13      |     | A   |
| 3 - Elettra Avenue         |                                                       | 5.4         | 18.97     |     | C   |        | 1.9         | 8.27      |     | A   |        |             |           |     |     |           | 1.6         | 7.73      |     | A   |
| 4 - Hambledon Road (north) |                                                       | 4.2         | 16.15     |     | C   |        | 2.0         | 8.22      |     | A   |        |             |           |     |     |           | 3.1         | 9.39      |     | A   |
|                            | A1 [Lane Simulation] - 2026 Base + Com Dev + Dev      |             |           |     |     |        |             |           |     |     |        |             |           |     |     |           |             |           |     |     |
| 1 - Milton road            | D8                                                    | 4.7         | 32.74     |     | D   | D9     | 3.7         | 21.42     |     | C   |        |             |           |     |     | D13       | 13.1        | 57.11     |     | F   |
| 2 - Hambledon Road (south) |                                                       | 7.4         | 12.61     |     | B   |        | 3.6         | 8.01      |     | A   |        |             |           |     |     |           | 4.7         | 10.37     |     | B   |
| 3 - Elettra Avenue         |                                                       | 9.2         | 32.76     |     | D   |        | 2.2         | 8.78      |     | A   |        |             |           |     |     |           | 1.7         | 8.96      |     | A   |
| 4 - Hambledon Road (north) |                                                       | 5.2         | 20.23     |     | C   |        | 1.7         | 8.49      |     | A   |        |             |           |     |     |           | 3.7         | 10.96     |     | B   |
|                            | A1 [Lane Simulation] - 2026 Base + Com Dev + Dev Sens |             |           |     |     |        |             |           |     |     |        |             |           |     |     |           |             |           |     |     |
| 1 - Milton road            | D11                                                   | 4.8         | 29.73     |     | D   | D12    | 5.1         | 22.40     |     | C   | D10    | 12.9        | 69.30     |     | F   |           |             |           |     |     |
| 2 - Hambledon Road (south) |                                                       | 6.4         | 11.55     |     | B   |        | 3.7         | 7.90      |     | A   |        | 5.0         | 9.73      |     | A   |           |             |           |     |     |
| 3 - Elettra Avenue         |                                                       | 7.9         | 23.78     |     | C   |        | 1.9         | 8.89      |     | A   |        | 1.6         | 8.52      |     | A   |           |             |           |     |     |
| 4 - Hambledon Road (north) |                                                       | 5.7         | 21.90     |     | C   |        | 2.0         | 8.18      |     | A   |        | 3.7         | 12.14     |     | B   |           |             |           |     |     |

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

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Arm and junction delays are averages for all movements, including movements with zero delay.

### File summary

#### File Description

|             |                                             |
|-------------|---------------------------------------------|
| Title       | Hambledon Road/ Milton Road/ Elettra Avenue |
| Location    | Waterlooville                               |
| Site number |                                             |
| Date        | 19/10/2021                                  |
| Version     |                                             |
| Status      | (new file)                                  |
| Identifier  |                                             |
| Client      |                                             |
| Jobnumber   | 19235                                       |
| Enumerator  | DTA\arcady                                  |
| Description |                                             |

### Units

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

### Analysis Options

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

Lane Simulation options

| Criteria type | Stop criteria (%) | Stop criteria time (s) | Stop criteria number of trials | Random seed | Results refresh speed (s) | Individual vehicle animation number of trials | Average animation capture interval (s) | Use quick response | Do flow sampling | Suppress automatic lane creation | Last run random seed | Last run number of trials | Last run time taken (s) |
|---------------|-------------------|------------------------|--------------------------------|-------------|---------------------------|-----------------------------------------------|----------------------------------------|--------------------|------------------|----------------------------------|----------------------|---------------------------|-------------------------|
| Delay         | 1.00              | 100000                 | 100000                         | -1          | 3                         | 1                                             | 60                                     | ✓                  |                  |                                  | 746329862            | 185                       | 32.78                   |

Demand Set Summary

| ID  | Scenario name                  | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|--------------------------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D1  | 2021 Base                      | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        |                   |
| D2  | 2021 Base                      | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        |                   |
| D3  | 2021 Base                      | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        |                   |
| D4  | 2026 Base + Com Dev            | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        |                   |
| D5  | 2026 Base + Com Dev            | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        | ✓                 |
| D6  | 2026 Base + Com Dev            | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        | ✓                 |
| D7  | 2026 Base + Com Dev + Dev      | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        |                   |
| D8  | 2026 Base + Com Dev + Dev      | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        | ✓                 |
| D9  | 2026 Base + Com Dev + Dev      | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        | ✓                 |
| D10 | 2026 Base + Com Dev + Dev Sens | AM               | ONE HOUR             | 08:00              | 09:30               |                          | 15                        | ✓                 |
| D11 | 2026 Base + Com Dev + Dev Sens | PM               | ONE HOUR             | 16:30              | 18:00               |                          | 15                        | ✓                 |
| D12 | 2026 Base + Com Dev + Dev Sens | SAT              | ONE HOUR             | 11:15              | 12:45               |                          | 15                        | ✓                 |
| D13 | 2026 Base + Com Dev + Dev      | AM DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |
| D14 | 2026 Base + Com Dev            | AM DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |

Analysis Set Details

| ID | Name                   | Use Lane Simulation | Include in report | Network flow scaling factor (%) | Network capacity scaling factor (%) |
|----|------------------------|---------------------|-------------------|---------------------------------|-------------------------------------|
| A1 | (Default Analysis Set) | ✓                   | ✓                 | 100.000                         | 100.000                             |

# (Default Analysis Set) - 2026 Base + Com Dev, PM

## Data Errors and Warnings

| Severity | Area            | Item                                     | Description                                                                                                      |
|----------|-----------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry        | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Info     | Lane Simulation | A1 [Lane Simulation]                     | This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.   |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 16.69              | C            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 16.69             | C           |

## Arms

### Arms

| Arm | Name                   | Description | No give-way line |
|-----|------------------------|-------------|------------------|
| 1   | Milton road            |             |                  |
| 2   | Hambleton Road (south) |             |                  |
| 3   | Elettra Avenue         |             |                  |
| 4   | Hambleton Road (north) |             |                  |

### Roundabout Geometry

| Arm                        | V - Approach road half-width (m) | E - Entry width (m) | I' - Effective flare length (m) | R - Entry radius (m) | D - Inscribed circle diameter (m) | PHI - Conflict (entry) angle (deg) | Entry only | Exit only |
|----------------------------|----------------------------------|---------------------|---------------------------------|----------------------|-----------------------------------|------------------------------------|------------|-----------|
| 1 - Milton road            | 3.40                             | 7.40                | 12.0                            | 20.0                 | 54.0                              | 15.2                               |            |           |
| 2 - Hambleton Road (south) | 7.30                             | 8.05                | 12.7                            | 47.5                 | 54.0                              | 18.0                               |            |           |
| 3 - Elettra Avenue         | 3.65                             | 10.50               | 52.6                            | 18.0                 | 54.0                              | 22.0                               |            |           |
| 4 - Hambleton Road (north) | 6.80                             | 7.90                | 5.0                             | 15.0                 | 54.0                              | 36.0                               |            |           |

### Slope / Intercept / Capacity

#### Arm Intercept Adjustments

| Arm                        | Type   | Reason | Direct intercept adjustment (PCU/hr) |
|----------------------------|--------|--------|--------------------------------------|
| 1 - Milton road            | Direct |        | 0                                    |
| 2 - Hambleton Road (south) | None   |        |                                      |
| 3 - Elettra Avenue         | None   |        |                                      |
| 4 - Hambleton Road (north) | None   |        |                                      |

#### Roundabout Slope and Intercept used in model

| Arm                        | Final slope | Final intercept (PCU/hr) |
|----------------------------|-------------|--------------------------|
| 1 - Milton road            | 0.604       | 1700                     |
| 2 - Hambleton Road (south) | 0.769       | 2571                     |
| 3 - Elettra Avenue         | 0.766       | 2628                     |
| 4 - Hambleton Road (north) | 0.666       | 2172                     |

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

#### Arm Capacity Adjustments

| Arm             | Type   | Reason | Direct capacity adjustment (PCU/hr) |
|-----------------|--------|--------|-------------------------------------|
| 1 - Milton road | Direct |        | 0                                   |

### Lane Simulation: Arm options

| Arm                        | Lane capacity source | Traffic considering secondary lanes (%) |
|----------------------------|----------------------|-----------------------------------------|
| 1 - Milton road            | Evenly split         | 10.00                                   |
| 2 - Hambleton Road (south) | Evenly split         | 10.00                                   |
| 3 - Elettra Avenue         | Evenly split         | 10.00                                   |
| 4 - Hambleton Road (north) | Evenly split         | 10.00                                   |

Lanes

| Arm                        | Side  | Lane level | Lane | Destination arms | Has limited storage | Storage (PCU) | Has bottleneck | Has obstruction | Minimum capacity (PCU/hr) | Maximum capacity (PCU/hr) | Signalised |
|----------------------------|-------|------------|------|------------------|---------------------|---------------|----------------|-----------------|---------------------------|---------------------------|------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | ✓                   | 3.00          |                |                 | 0                         | 99999                     |            |
|                            |       |            | 2    | 1, 2, 3, 4       | ✓                   | 3.00          |                |                 | 0                         | 99999                     |            |
|                            | Exit  | 1          | 1    | (1, 2, 3, 4)     |                     | Infinity      |                |                 |                           |                           |            |
|                            |       |            | 1    |                  |                     | Infinity      |                |                 |                           |                           |            |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             |                     | Infinity      |                |                 | 0                         | 99999                     |            |
|                            |       |            | 2    | 1, 2, 4          |                     | Infinity      |                |                 | 0                         | 99999                     |            |
|                            | Exit  | 1          | 1    |                  |                     | Infinity      |                |                 |                           |                           |            |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | ✓                   | 12.00         |                |                 | 0                         | 99999                     |            |
|                            |       |            | 2    | 2, 3             | ✓                   | 12.00         |                |                 | 0                         | 99999                     |            |
|                            | Exit  | 1          | 1    | (1, 2, 3, 4)     |                     | Infinity      |                |                 |                           |                           |            |
|                            |       |            | 1    |                  |                     | Infinity      |                |                 |                           |                           |            |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             |                     | Infinity      |                |                 | 0                         | 99999                     |            |
|                            |       |            | 2    | 2, 3, 4          |                     | Infinity      |                |                 | 0                         | 99999                     |            |
|                            | Exit  | 1          | 1    |                  |                     | Infinity      |                |                 |                           |                           |            |

Entry Lane slope and intercept

| Arm                        | Side  | Lane level | Lane | Final slope | Final intercept (PCU/hr) |
|----------------------------|-------|------------|------|-------------|--------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 0.302       | 850                      |
|                            |       |            | 2    | 0.302       | 850                      |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 0.384       | 1286                     |
|                            |       |            | 2    | 0.384       | 1286                     |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 0.383       | 1314                     |
|                            |       |            | 2    | 0.383       | 1314                     |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 0.333       | 1086                     |
|                            |       |            | 2    | 0.333       | 1086                     |

Summary of Entry Lane allowed movements

| Arm                        | Lane Level | Lane | Destination arm |                        |                |                        |
|----------------------------|------------|------|-----------------|------------------------|----------------|------------------------|
|                            |            |      | Milton road     | Hambleton Road (south) | Elettra Avenue | Hambleton Road (north) |
| 1 - Milton road            | 1          | 1    |                 | ✓                      |                |                        |
|                            |            | 2    | ✓               | ✓                      | ✓              | ✓                      |
|                            | 2          | 1    | ✓               | ✓                      | ✓              | ✓                      |
| 2 - Hambleton Road (south) | 1          | 1    |                 |                        | ✓              | ✓                      |
|                            |            | 2    | ✓               | ✓                      |                | ✓                      |
| 3 - Elettra Avenue         | 1          | 1    | ✓               |                        |                | ✓                      |
|                            |            | 2    |                 | ✓                      | ✓              |                        |
|                            | 2          | 1    | ✓               | ✓                      | ✓              | ✓                      |
| 4 - Hambleton Road (north) | 1          | 1    | ✓               | ✓                      |                |                        |
|                            |            | 2    |                 | ✓                      | ✓              | ✓                      |

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 |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D5 | 2026 Base + Com Dev | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 498                     | 100.000            |
| 2 - Hambleton Road (south) |            | ONE HOUR     | ✓            | 1661                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 913                     | 100.000            |
| 4 - Hambleton Road (north) |            | ONE HOUR     | ✓            | 799                     | 100.000            |

Origin-Destination Data

| Demand (PCU/hr) |                            | To              |                            |                    |                            |
|-----------------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From            |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
|                 | 1 - Milton road            | 0               | 313                        | 138                | 47                         |
|                 | 2 - Hambleton Road (south) | 539             | 102                        | 308                | 712                        |
|                 | 3 - Elettra Avenue         | 256             | 459                        | 0                  | 198                        |
|                 | 4 - Hambleton Road (north) | 43              | 596                        | 125                | 35                         |

## Vehicle Mix

### Heavy Vehicle Percentages

| From                       | To |                 |                            |                    |                            |
|----------------------------|----|-----------------|----------------------------|--------------------|----------------------------|
|                            |    | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| 1 - Milton road            |    | 0               | 4                          | 0                  | 1                          |
| 2 - Hambleton Road (south) |    | 3               | 2                          | 0                  | 6                          |
| 3 - Elettra Avenue         |    | 0               | 1                          | 0                  | 1                          |
| 4 - Hambleton Road (north) |    | 0               | 4                          | 0                  | 1                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 27.22         | 4.2             | D       | 455                     | 683                           |
| 2 - Hambleton Road (south) | 12.56         | 7.2             | B       | 1522                    | 2283                          |
| 3 - Elettra Avenue         | 18.97         | 5.4             | C       | 834                     | 1252                          |
| 4 - Hambleton Road (north) | 16.15         | 4.2             | C       | 730                     | 1095                          |

### Main Results for each time segment

#### 16:30 - 16:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 381                   | 95                      | 990                       | 381                 | 373                         | 633                             | 0.0               | 1.0             | 9.311     | A                             |
| 2 - Hambleton Road (south) | 1248                  | 312                     | 264                       | 1246                | 1243                        | 1108                            | 0.0               | 2.2             | 5.584     | A                             |
| 3 - Elettra Avenue         | 686                   | 171                     | 1079                      | 687                 | 688                         | 431                             | 0.0               | 1.3             | 6.581     | A                             |
| 4 - Hambleton Road (north) | 598                   | 149                     | 1022                      | 602                 | 595                         | 745                             | 0.0               | 0.8             | 6.762     | A                             |

#### 16:45 - 17:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 440                   | 110                     | 1176                      | 442                 | 441                         | 751                             | 1.0               | 1.3             | 11.882    | B                             |
| 2 - Hambleton Road (south) | 1485                  | 371                     | 307                       | 1483                | 1488                        | 1311                            | 2.2               | 3.0             | 7.085     | A                             |
| 3 - Elettra Avenue         | 815                   | 204                     | 1281                      | 817                 | 815                         | 509                             | 1.3               | 1.9             | 8.799     | A                             |
| 4 - Hambleton Road (north) | 717                   | 179                     | 1209                      | 717                 | 710                         | 890                             | 0.8               | 1.8             | 8.497     | A                             |

#### 17:00 - 17:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 544                   | 136                     | 1445                      | 539                 | 534                         | 929                             | 1.3               | 4.0             | 22.002    | C                             |
| 2 - Hambleton Road (south) | 1846                  | 461                     | 372                       | 1859                | 1828                        | 1612                            | 3.0               | 6.1             | 12.021    | B                             |
| 3 - Elettra Avenue         | 1001                  | 250                     | 1600                      | 1003                | 988                         | 631                             | 1.9               | 5.4             | 16.924    | C                             |
| 4 - Hambleton Road (north) | 872                   | 218                     | 1502                      | 872                 | 866                         | 1101                            | 1.8               | 4.2             | 14.988    | B                             |

#### 17:15 - 17:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 541                   | 135                     | 1449                      | 542                 | 544                         | 917                             | 4.0               | 4.2             | 27.216    | D                             |
| 2 - Hambleton Road (south) | 1835                  | 459                     | 374                       | 1834                | 1837                        | 1617                            | 6.1               | 7.2             | 12.563    | B                             |
| 3 - Elettra Avenue         | 1001                  | 250                     | 1598                      | 1002                | 1001                        | 610                             | 5.4               | 5.2             | 18.967    | C                             |
| 4 - Hambleton Road (north) | 883                   | 221                     | 1487                      | 879                 | 879                         | 1112                            | 4.2               | 4.0             | 16.148    | C                             |

#### 17:30 - 17:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 448                   | 112                     | 1176                      | 448                 | 459                         | 752                             | 4.2               | 1.5             | 14.285    | B                             |
| 2 - Hambleton Road (south) | 1474                  | 368                     | 310                       | 1477                | 1511                        | 1315                            | 7.2               | 2.7             | 7.726     | A                             |
| 3 - Elettra Avenue         | 817                   | 204                     | 1273                      | 823                 | 832                         | 515                             | 5.2               | 1.9             | 10.355    | B                             |
| 4 - Hambleton Road (north) | 709                   | 177                     | 1219                      | 710                 | 724                         | 877                             | 4.0               | 1.9             | 9.388     | A                             |

#### 17:45 - 18:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 377                   | 94                      | 986                       | 375                 | 380                         | 644                             | 1.5               | 1.0             | 9.597     | A                             |
| 2 - Hambleton Road (south) | 1246                  | 312                     | 261                       | 1255                | 1261                        | 1100                            | 2.7               | 1.6             | 5.730     | A                             |
| 3 - Elettra Avenue         | 686                   | 171                     | 1088                      | 688                 | 690                         | 428                             | 1.9               | 1.2             | 6.827     | A                             |
| 4 - Hambleton Road (north) | 600                   | 150                     | 1031                      | 599                 | 604                         | 745                             | 1.9               | 1.2             | 6.851     | A                             |

## Lane Results

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

### Lanes: Main Results for each time segment

#### 16:30 - 16:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 144                   | 551               | 0.261 | 143                 | 139                         | 0.0               | 0.4             | 8.014     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 238                   | 551               | 0.431 | 238                 | 233                         | 0.0               | 0.7             | 9.562     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 381                   |                   |       | 381                 | 377                         | 0.0               | 0.0             | 0.320     | A                             |
|                            | Exit  | 1          | 1    |                  | 633                   |                   |       | 633                 | 629                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 543                   | 1184              | 0.459 | 543                 | 544                         | 0.0               | 0.9             | 4.972     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 704                   | 1184              | 0.595 | 704                 | 699                         | 0.0               | 1.3             | 6.062     | A                             |
|                            | Exit  | 1          | 1    |                  | 1108                  |                   |       | 1108                | 1101                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 344                   | 901               | 0.382 | 345                 | 341                         | 0.0               | 0.6             | 6.593     | A                             |
|                            |       |            | 2    | 2, 3             | 342                   | 901               | 0.380 | 342                 | 347                         | 0.0               | 0.7             | 6.559     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 686                   |                   |       | 686                 | 694                         | 0.0               | 0.0             | 0.004     | A                             |
|                            | Exit  | 1          | 1    |                  | 431                   |                   |       | 431                 | 427                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 276                   | 746               | 0.370 | 277                 | 273                         | 0.0               | 0.4             | 6.428     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 322                   | 746               | 0.432 | 324                 | 322                         | 0.0               | 0.4             | 7.043     | A                             |
|                            | Exit  | 1          | 1    |                  | 745                   |                   |       | 745                 | 743                         | 0.0               | 0.0             | 0.000     | A                             |

#### 16:45 - 17:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 170                   | 495               | 0.344 | 171                 | 171                         | 0.4               | 0.4             | 9.605     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 271                   | 495               | 0.547 | 271                 | 270                         | 0.7               | 0.8             | 11.670    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 440                   |                   |       | 441                 | 441                         | 0.0               | 0.1             | 0.999     | A                             |
|                            | Exit  | 1          | 1    |                  | 751                   |                   |       | 751                 | 753                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 666                   | 1167              | 0.571 | 665                 | 667                         | 0.9               | 1.0             | 6.087     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 819                   | 1167              | 0.702 | 817                 | 821                         | 1.3               | 2.0             | 7.896     | A                             |
|                            | Exit  | 1          | 1    |                  | 1311                  |                   |       | 1311                | 1310                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 404                   | 823               | 0.490 | 405                 | 403                         | 0.6               | 0.9             | 8.713     | A                             |
|                            |       |            | 2    | 2, 3             | 412                   | 823               | 0.500 | 412                 | 412                         | 0.7               | 1.0             | 8.873     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 815                   |                   |       | 815                 | 818                         | 0.0               | 0.0             | 0.006     | A                             |
|                            | Exit  | 1          | 1    |                  | 509                   |                   |       | 509                 | 506                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 333                   | 684               | 0.487 | 333                 | 329                         | 0.4               | 0.8             | 8.270     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 385                   | 684               | 0.563 | 384                 | 381                         | 0.4               | 1.0             | 8.692     | A                             |
|                            | Exit  | 1          | 1    |                  | 890                   |                   |       | 890                 | 886                         | 0.0               | 0.0             | 0.000     | A                             |

#### 17:00 - 17:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 224                   | 414               | 0.542 | 225                 | 218                         | 0.4               | 0.9             | 13.889    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 315                   | 414               | 0.761 | 314                 | 315                         | 0.8               | 1.7             | 16.982    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 544                   |                   |       | 539                 | 539                         | 0.1               | 1.4             | 6.201     | A                             |
|                            | Exit  | 1          | 1    |                  | 929                   |                   |       | 929                 | 911                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 872                   | 1142              | 0.763 | 879                 | 856                         | 1.0               | 2.5             | 10.386    | B                             |
|                            |       |            | 2    | 1, 2, 4          | 973                   | 1142              | 0.852 | 980                 | 972                         | 2.0               | 3.6             | 13.465    | B                             |
|                            | Exit  | 1          | 1    |                  | 1612                  |                   |       | 1612                | 1593                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 496                   | 701               | 0.707 | 497                 | 488                         | 0.9               | 2.5             | 16.309    | C                             |
|                            |       |            | 2    | 2, 3             | 508                   | 701               | 0.724 | 506                 | 499                         | 1.0               | 2.8             | 16.479    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 1001                  |                   |       | 1003                | 1002                        | 0.0               | 0.1             | 0.520     | A                             |
|                            | Exit  | 1          | 1    |                  | 631                   |                   |       | 631                 | 624                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 419                   | 586               | 0.714 | 417                 | 413                         | 0.8               | 2.0             | 14.368    | B                             |
|                            |       |            | 2    | 2, 3, 4          | 453                   | 586               | 0.773 | 455                 | 453                         | 1.0               | 2.1             | 15.548    | C                             |
|                            | Exit  | 1          | 1    |                  | 1101                  |                   |       | 1101                | 1087                        | 0.0               | 0.0             | 0.000     | A                             |

#### 17:15 - 17:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 224                   | 412               | 0.544 | 224                 | 225                         | 0.9               | 1.1             | 15.505    | C                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 319                   | 412               | 0.773 | 318                 | 319                         | 1.7               | 1.7             | 19.288    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 541                   |                   |       | 543                 | 544                         | 1.4               | 1.4             | 9.482     | A                             |
|                            | Exit  | 1          | 1    |                  | 917                   |                   |       | 917                 | 919                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 858                   | 1142              | 0.752 | 860                 | 861                         | 2.5               | 2.7             | 10.705    | B                             |
|                            |       |            | 2    | 1, 2, 4          | 976                   | 1142              | 0.855 | 974                 | 977                         | 3.6               | 4.5             | 14.200    | B                             |
|                            | Exit  | 1          | 1    |                  | 1617                  |                   |       | 1617                | 1621                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 496                   | 702               | 0.707 | 497                 | 495                         | 2.5               | 2.4             | 17.677    | C                             |
|                            |       |            | 2    | 2, 3             | 504                   | 702               | 0.718 | 505                 | 505                         | 2.8               | 2.6             | 19.127    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 1001                  |                   |       | 1001                | 999                         | 0.1               | 0.2             | 0.558     | A                             |
|                            | Exit  | 1          | 1    |                  | 610                   |                   |       | 610                 | 616                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 428                   | 591               | 0.724 | 426                 | 423                         | 2.0               | 1.8             | 15.498    | C                             |
|                            |       |            | 2    | 2, 3, 4          | 455                   | 591               | 0.770 | 453                 | 457                         | 2.1               | 2.1             | 16.742    | C                             |
|                            | Exit  | 1          | 1    |                  | 1112                  |                   |       | 1112                | 1105                        | 0.0               | 0.0             | 0.000     | A                             |

17:30 - 17:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 175                   | 495               | 0.353 | 174                 | 181                         | 1.1               | 0.5             | 10.843    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 274                   | 495               | 0.553 | 274                 | 278                         | 1.7               | 0.9             | 13.143    | B                             |
|                            | Exit  | 2          | 1    | (1, 2, 3, 4)     | 448                   |                   |       | 448                 | 453                         | 1.4               | 0.2             | 2.133     | A                             |
|                            |       |            | 1    |                  | 752                   |                   |       | 752                 | 768                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 664                   | 1166              | 0.569 | 665                 | 681                         | 2.7               | 1.1             | 6.744     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 810                   | 1166              | 0.694 | 812                 | 831                         | 4.5               | 1.7             | 8.537     | A                             |
|                            | Exit  | 1          | 1    |                  | 1315                  |                   |       | 1315                | 1339                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 408                   | 827               | 0.493 | 409                 | 413                         | 2.4               | 0.9             | 9.629     | A                             |
|                            |       |            | 2    | 2, 3             | 410                   | 827               | 0.496 | 413                 | 419                         | 2.6               | 1.0             | 10.632    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 817                   |                   |       | 818                 | 820                         | 0.2               | 0.0             | 0.242     | A                             |
|                            | Exit  | 1          | 1    |                  | 515                   |                   |       | 515                 | 522                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 326                   | 680               | 0.479 | 327                 | 337                         | 1.8               | 0.8             | 8.870     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 383                   | 680               | 0.563 | 383                 | 387                         | 2.1               | 1.0             | 9.835     | A                             |
|                            | Exit  | 1          | 1    |                  | 877                   |                   |       | 877                 | 898                         | 0.0               | 0.0             | 0.000     | A                             |

17:45 - 18:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 141                   | 552               | 0.256 | 141                 | 142                         | 0.5               | 0.3             | 7.951     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 236                   | 552               | 0.427 | 234                 | 238                         | 0.9               | 0.7             | 9.891     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 377                   |                   |       | 377                 | 378                         | 0.2               | 0.0             | 0.444     | A                             |
|                            | Exit  | 1          | 1    |                  | 644                   |                   |       | 644                 | 637                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 546                   | 1185              | 0.461 | 549                 | 555                         | 1.1               | 0.5             | 5.008     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 700                   | 1185              | 0.591 | 705                 | 706                         | 1.7               | 1.0             | 6.302     | A                             |
|                            | Exit  | 1          | 1    |                  | 1100                  |                   |       | 1100                | 1112                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 344                   | 898               | 0.383 | 346                 | 342                         | 0.9               | 0.6             | 6.901     | A                             |
|                            |       |            | 2    | 2, 3             | 342                   | 898               | 0.381 | 343                 | 348                         | 1.0               | 0.6             | 6.753     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 686                   |                   |       | 686                 | 687                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 428                   |                   |       | 428                 | 432                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 273                   | 743               | 0.367 | 272                 | 275                         | 0.8               | 0.5             | 6.503     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 327                   | 743               | 0.440 | 327                 | 328                         | 1.0               | 0.6             | 7.141     | A                             |
|                            | Exit  | 1          | 1    |                  | 745                   |                   |       | 745                 | 753                         | 0.0               | 0.0             | 0.000     | A                             |

## Lane movements: Main Results for each time segment

16:30 - 16:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 144                   | 36                      | 850                          | 550               | 0.261 | 143                 | 139                         | 0.0               | 0.4             | 8.014     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 97                    | 24                      | 850                          | 549               | 0.177 | 97                  | 96                          | 0.0               | 0.2             | 7.988     | A                             |
|                            |       |            |      | 3      | 106                   | 26                      | 850                          | 552               | 0.192 | 107                 | 102                         | 0.0               | 0.3             | 10.529    | B                             |
|                            |       |            |      | 4      | 35                    | 9                       | 845                          | 550               | 0.063 | 35                  | 35                          | 0.0               | 0.1             | 10.882    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 241                   | 60                      | -                            | -                 | -     | 241                 | 238                         | 0.0               | 0.0             | 0.201     | A                             |
|                            |       |            |      | 3      | 106                   | 26                      | -                            | -                 | -     | 106                 | 103                         | 0.0               | 0.0             | 0.535     | A                             |
|                            |       |            |      | 4      | 35                    | 9                       | -                            | -                 | -     | 35                  | 36                          | 0.0               | 0.0             | 0.458     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 228                   | 57                      | 1286                         | 1184              | 0.192 | 227                 | 230                         | 0.0               | 0.4             | 5.372     | A                             |
|                            |       |            |      | 4      | 315                   | 79                      | 1286                         | 1185              | 0.266 | 316                 | 314                         | 0.0               | 0.5             | 4.660     | A                             |
|                            |       | 2          | 1    | 1      | 403                   | 101                     | 1286                         | 1184              | 0.340 | 402                 | 403                         | 0.0               | 0.8             | 6.761     | A                             |
|                            |       |            |      | 2      | 81                    | 20                      | 1286                         | 1184              | 0.069 | 81                  | 77                          | 0.0               | 0.2             | 6.529     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 220                   | 55                      | 1286                         | 1184              | 0.186 | 221                 | 219                         | 0.0               | 0.3             | 4.563     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 196                   | 49                      | 1314                         | 901               | 0.218 | 197                 | 193                         | 0.0               | 0.4             | 6.582     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 148                   | 37                      | 1314                         | 901               | 0.164 | 148                 | 149                         | 0.0               | 0.2             | 6.609     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 342                   | 86                      | 1314                         | 902               | 0.379 | 342                 | 347                         | 0.0               | 0.7             | 6.559     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 196                   | 49                      | -                            | -                 | -     | 196                 | 194                         | 0.0               | 0.0             | 0.006     | A                             |
|                            |       |            |      | 2      | 342                   | 86                      | -                            | -                 | -     | 342                 | 350                         | 0.0               | 0.0             | 0.002     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 148                   | 37                      | -                            | -                 | -     | 148                 | 150                         | 0.0               | 0.0             | 0.007     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 34                    | 8                       | 1086                         | 746               | 0.045 | 34                  | 34                          | 0.0               | 0.0             | 7.220     | A                             |
|                            |       |            |      | 2      | 242                   | 61                      | 1086                         | 746               | 0.325 | 243                 | 239                         | 0.0               | 0.4             | 6.312     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 200                   | 50                      | 1086                         | 746               | 0.268 | 202                 | 202                         | 0.0               | 0.2             | 6.317     | A                             |
|                            |       |            |      | 3      | 97                    | 24                      | 1086                         | 746               | 0.130 | 97                  | 94                          | 0.0               | 0.2             | 8.247     | A                             |
|                            |       |            |      | 4      | 25                    | 6                       | 1086                         | 746               | 0.034 | 26                  | 26                          | 0.0               | 0.0             | 8.086     | A                             |

16:45 - 17:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 170                   | 43                      | 850                          | 496               | 0.344 | 171                 | 171                         | 0.4               | 0.4             | 9.605     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 104                   | 26                      | 850                          | 495               | 0.211 | 105                 | 106                         | 0.2               | 0.2             | 9.624     | A                             |
|                            |       |            |      | 3      | 122                   | 30                      | 850                          | 495               | 0.246 | 122                 | 121                         | 0.3               | 0.5             | 12.965    | B                             |
|                            |       |            |      | 4      | 45                    | 11                      | 850                          | 493               | 0.091 | 44                  | 43                          | 0.1               | 0.1             | 12.868    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 274                   | 69                      | -                            | -                 | -     | 275                 | 277                         | 0.0               | 0.0             | 0.717     | A                             |
|                            |       |            |      | 3      | 121                   | 30                      | -                            | -                 | -     | 122                 | 122                         | 0.0               | 0.0             | 1.462     | A                             |
|                            |       |            |      | 4      | 45                    | 11                      | -                            | -                 | -     | 45                  | 43                          | 0.0               | 0.0             | 1.448     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 278                   | 69                      | 1286                         | 1168              | 0.238 | 277                 | 274                         | 0.4               | 0.4             | 6.502     | A                             |
|                            |       |            |      | 4      | 388                   | 97                      | 1286                         | 1168              | 0.332 | 388                 | 393                         | 0.5               | 0.6             | 5.779     | A                             |
|                            |       |            | 2    | 1      | 481                   | 120                     | 1286                         | 1167              | 0.412 | 479                 | 485                         | 0.8               | 1.3             | 8.789     | A                             |
|                            |       |            |      | 2      | 88                    | 22                      | 1286                         | 1168              | 0.075 | 88                  | 91                          | 0.2               | 0.2             | 8.858     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 250                   | 62                      | 1286                         | 1167              | 0.214 | 250                 | 245                         | 0.3               | 0.4             | 5.697     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 230                   | 58                      | 1314                         | 823               | 0.280 | 230                 | 229                         | 0.4               | 0.6             | 8.621     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 174                   | 43                      | 1314                         | 823               | 0.211 | 175                 | 175                         | 0.2               | 0.3             | 8.835     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 412                   | 103                     | 1314                         | 823               | 0.500 | 412                 | 412                         | 0.7               | 1.0             | 8.873     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 42                    | 10                      | 1086                         | 683               | 0.061 | 42                  | 40                          | 0.0               | 0.1             | 9.394     | A                             |
|                            |       |            |      | 2      | 291                   | 73                      | 1086                         | 685               | 0.425 | 291                 | 290                         | 0.4               | 0.7             | 8.110     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 244                   | 61                      | 1086                         | 684               | 0.356 | 243                 | 240                         | 0.2               | 0.6             | 7.914     | A                             |
|                            |       |            |      | 3      | 109                   | 27                      | 1086                         | 684               | 0.159 | 110                 | 111                         | 0.2               | 0.3             | 10.091    | B                             |
|                            |       |            |      | 4      | 32                    | 8                       | 1086                         | 685               | 0.047 | 31                  | 31                          | 0.0               | 0.1             | 9.504     | A                             |

17:00 - 17:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 224                   | 56                      | 850                          | 414               | 0.542 | 225                 | 218                         | 0.4               | 0.9             | 13.889    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 120                   | 30                      | 850                          | 411               | 0.291 | 118                 | 118                         | 0.2               | 0.6             | 14.862    | B                             |
|                            |       |            |      | 3      | 147                   | 37                      | 850                          | 414               | 0.355 | 148                 | 146                         | 0.5               | 0.9             | 18.365    | C                             |
|                            |       |            |      | 4      | 48                    | 12                      | 850                          | 416               | 0.115 | 48                  | 50                          | 0.1               | 0.2             | 17.780    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 347                   | 87                      | -                            | -                 | -     | 344                 | 340                         | 0.0               | 0.8             | 5.698     | A                             |
|                            |       |            |      | 3      | 147                   | 37                      | -                            | -                 | -     | 147                 | 148                         | 0.0               | 0.4             | 7.233     | A                             |
|                            |       |            |      | 4      | 49                    | 12                      | -                            | -                 | -     | 48                  | 51                          | 0.0               | 0.2             | 6.445     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 342                   | 86                      | 1286                         | 1143              | 0.300 | 347                 | 343                         | 0.4               | 1.0             | 11.200    | B                             |
|                            |       |            |      | 4      | 530                   | 132                     | 1286                         | 1143              | 0.463 | 532                 | 513                         | 0.6               | 1.5             | 9.811     | A                             |
|                            |       |            | 2    | 1      | 599                   | 150                     | 1286                         | 1142              | 0.525 | 603                 | 589                         | 1.3               | 2.4             | 14.799    | B                             |
|                            |       |            |      | 2      | 112                   | 28                      | 1286                         | 1142              | 0.098 | 113                 | 111                         | 0.2               | 0.5             | 14.891    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 262                   | 66                      | 1286                         | 1143              | 0.230 | 265                 | 272                         | 0.4               | 0.8             | 9.884     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 281                   | 70                      | 1314                         | 703               | 0.400 | 280                 | 275                         | 0.6               | 1.4             | 16.284    | C                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 215                   | 54                      | 1314                         | 700               | 0.307 | 216                 | 213                         | 0.3               | 1.1             | 16.341    | C                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 508                   | 127                     | 1314                         | 702               | 0.724 | 506                 | 499                         | 1.0               | 2.8             | 16.479    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 280                   | 70                      | -                            | -                 | -     | 281                 | 279                         | 0.0               | 0.0             | 0.512     | A                             |
|                            |       |            |      | 2      | 507                   | 127                     | -                            | -                 | -     | 508                 | 507                         | 0.0               | 0.1             | 0.523     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 214                   | 54                      | -                            | -                 | -     | 215                 | 216                         | 0.0               | 0.0             | 0.526     | A                             |
|                            |       |            | 2    | 1      | 45                    | 11                      | 1086                         | 586               | 0.077 | 46                  | 47                          | 0.1               | 0.2             | 16.597    | C                             |
|                            |       |            |      | 2      | 374                   | 93                      | 1086                         | 587               | 0.637 | 371                 | 366                         | 0.7               | 1.8             | 14.074    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 279                   | 70                      | 1086                         | 587               | 0.475 | 279                 | 280                         | 0.6               | 1.3             | 14.046    | B                             |
|                            |       |            |      | 3      | 134                   | 34                      | 1086                         | 587               | 0.228 | 136                 | 135                         | 0.3               | 0.7             | 17.964    | C                             |
|                            |       |            |      | 4      | 40                    | 10                      | 1086                         | 589               | 0.068 | 40                  | 38                          | 0.1               | 0.2             | 17.568    | C                             |

17:15 - 17:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 224                   | 56                      | 850                          | 412               | 0.544 | 224                 | 225                         | 0.9               | 1.1             | 15.505    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 116                   | 29                      | 850                          | 413               | 0.281 | 116                 | 117                         | 0.6               | 0.5             | 16.625    | C                             |
|                            |       |            |      | 3      | 150                   | 38                      | 850                          | 413               | 0.363 | 150                 | 149                         | 0.9               | 0.9             | 20.873    | C                             |
|                            |       |            |      | 4      | 53                    | 13                      | 850                          | 413               | 0.127 | 52                  | 52                          | 0.2               | 0.3             | 20.500    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 340                   | 85                      | -                            | -                 | -     | 341                 | 342                         | 0.8               | 0.9             | 8.630     | A                             |
|                            |       |            |      | 3      | 149                   | 37                      | -                            | -                 | -     | 150                 | 149                         | 0.4               | 0.4             | 10.753    | B                             |
|                            |       |            |      | 4      | 52                    | 13                      | -                            | -                 | -     | 53                  | 53                          | 0.2               | 0.2             | 11.222    | B                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 325                   | 81                      | 1286                         | 1142              | 0.284 | 326                 | 332                         | 1.0               | 1.0             | 11.147    | B                             |
|                            |       |            |      | 4      | 533                   | 133                     | 1286                         | 1142              | 0.467 | 533                 | 529                         | 1.5               | 1.7             | 10.411    | B                             |
|                            |       |            | 2    | 1      | 596                   | 149                     | 1286                         | 1141              | 0.522 | 592                 | 593                         | 2.4               | 3.0             | 15.552    | C                             |
|                            |       |            |      | 2      | 112                   | 28                      | 1286                         | 1143              | 0.098 | 112                 | 114                         | 0.5               | 0.5             | 15.740    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 268                   | 67                      | 1286                         | 1142              | 0.235 | 269                 | 270                         | 0.8               | 0.9             | 10.460    | B                             |
|                            |       | 2          | 1    | 1      | 277                   | 69                      | 1314                         | 700               | 0.396 | 278                 | 279                         | 1.4               | 1.3             | 17.535    | C                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 219                   | 55                      | 1314                         | 703               | 0.312 | 219                 | 216                         | 1.1               | 1.1             | 17.862    | C                             |
| 3 - Elettra Avenue         | Entry | 1          | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 504                   | 126                     | 1314                         | 703               | 0.717 | 505                 | 505                         | 2.8               | 2.6             | 19.127    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 277                   | 69                      | -                            | -                 | -     | 277                 | 279                         | 0.0               | 0.0             | 0.560     | A                             |
|                            |       |            |      | 2      | 504                   | 126                     | -                            | -                 | -     | 504                 | 505                         | 0.1               | 0.1             | 0.561     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 219                   | 55                      | -                            | -                 | -     | 219                 | 216                         | 0.0               | 0.0             | 0.549     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 47                    | 12                      | 1086                         | 588               | 0.079 | 47                  | 46                          | 0.2               | 0.2             | 17.429    | C                             |
|                            |       |            |      | 2      | 381                   | 95                      | 1086                         | 591               | 0.646 | 379                 | 376                         | 1.8               | 1.6             | 15.251    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 283                   | 71                      | 1086                         | 591               | 0.478 | 281                 | 284                         | 1.3               | 1.2             | 15.227    | C                             |
|                            |       |            |      | 3      | 135                   | 34                      | 1086                         | 591               | 0.228 | 134                 | 135                         | 0.7               | 0.7             | 19.250    | C                             |
|                            |       |            |      | 4      | 38                    | 9                       | 1080                         | 587               | 0.064 | 38                  | 38                          | 0.2               | 0.2             | 18.743    | C                             |

17:30 - 17:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 175                   | 44                      | 850                          | 495               | 0.353 | 174                 | 181                         | 1.1               | 0.5             | 10.843    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 109                   | 27                      | 850                          | 495               | 0.220 | 109                 | 108                         | 0.5               | 0.3             | 10.982    | B                             |
|                            |       |            |      | 3      | 123                   | 31                      | 850                          | 494               | 0.249 | 123                 | 127                         | 0.9               | 0.5             | 14.589    | B                             |
|                            |       |            |      | 4      | 42                    | 10                      | 850                          | 495               | 0.085 | 43                  | 44                          | 0.3               | 0.1             | 14.120    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 283                   | 71                      | -                            | -                 | -     | 283                 | 285                         | 0.9               | 0.1             | 1.870     | A                             |
|                            |       |            |      | 3      | 123                   | 31                      | -                            | -                 | -     | 123                 | 125                         | 0.4               | 0.1             | 2.558     | A                             |
|                            |       |            |      | 4      | 42                    | 10                      | -                            | -                 | -     | 42                  | 43                          | 0.2               | 0.0             | 2.585     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 277                   | 69                      | 1286                         | 1167              | 0.237 | 278                 | 280                         | 1.0               | 0.4             | 7.297     | A                             |
|                            |       |            |      | 4      | 387                   | 97                      | 1286                         | 1167              | 0.332 | 387                 | 401                         | 1.7               | 0.6             | 6.335     | A                             |
|                            |       |            | 2    | 1      | 474                   | 119                     | 1286                         | 1167              | 0.406 | 476                 | 493                         | 3.0               | 1.1             | 9.497     | A                             |
|                            |       |            |      | 2      | 91                    | 23                      | 1286                         | 1166              | 0.078 | 91                  | 92                          | 0.5               | 0.2             | 9.439     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 245                   | 61                      | 1286                         | 1167              | 0.210 | 246                 | 245                         | 0.9               | 0.4             | 6.198     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 237                   | 59                      | 1314                         | 827               | 0.286 | 238                 | 236                         | 1.3               | 0.5             | 9.594     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 171                   | 43                      | 1314                         | 826               | 0.207 | 171                 | 178                         | 1.1               | 0.3             | 9.675     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 410                   | 103                     | 1314                         | 828               | 0.495 | 413                 | 419                         | 2.6               | 1.0             | 10.632    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 237                   | 59                      | -                            | -                 | -     | 237                 | 232                         | 0.0               | 0.0             | 0.249     | A                             |
|                            |       |            |      | 2      | 410                   | 102                     | -                            | -                 | -     | 410                 | 413                         | 0.1               | 0.0             | 0.263     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 171                   | 43                      | -                            | -                 | -     | 171                 | 175                         | 0.0               | 0.0             | 0.182     | A                             |
|                            |       |            | 2    | 1      | 38                    | 10                      | 1086                         | 682               | 0.056 | 37                  | 38                          | 0.2               | 0.1             | 9.917     | A                             |
|                            |       |            |      | 2      | 288                   | 72                      | 1086                         | 681               | 0.423 | 290                 | 298                         | 1.6               | 0.7             | 8.730     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 237                   | 59                      | 1086                         | 681               | 0.348 | 238                 | 240                         | 1.2               | 0.5             | 8.903     | A                             |
|                            |       |            |      | 3      | 115                   | 29                      | 1086                         | 680               | 0.169 | 114                 | 116                         | 0.7               | 0.4             | 11.328    | B                             |
|                            |       |            |      | 4      | 31                    | 8                       | 1086                         | 678               | 0.046 | 31                  | 31                          | 0.2               | 0.2             | 11.227    | B                             |

17:45 - 18:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 141                   | 35                      | 850                          | 552               | 0.256 | 141                 | 142                         | 0.5               | 0.3             | 7.951     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 91                    | 23                      | 850                          | 550               | 0.165 | 91                  | 93                          | 0.3               | 0.2             | 8.313     | A                             |
|                            |       |            |      | 3      | 107                   | 27                      | 850                          | 553               | 0.193 | 106                 | 106                         | 0.5               | 0.4             | 10.807    | B                             |
|                            |       |            |      | 4      | 38                    | 9                       | 850                          | 551               | 0.069 | 38                  | 39                          | 0.1               | 0.1             | 11.023    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 232                   | 58                      | -                            | -                 | -     | 232                 | 234                         | 0.1               | 0.0             | 0.291     | A                             |
|                            |       |            |      | 3      | 107                   | 27                      | -                            | -                 | -     | 107                 | 106                         | 0.1               | 0.0             | 0.640     | A                             |
|                            |       |            |      | 4      | 38                    | 9                       | -                            | -                 | -     | 38                  | 39                          | 0.0               | 0.0             | 0.804     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 231                   | 58                      | 1286                         | 1185              | 0.195 | 232                 | 235                         | 0.4               | 0.3             | 5.434     | A                             |
|                            |       |            |      | 4      | 315                   | 79                      | 1286                         | 1186              | 0.266 | 317                 | 321                         | 0.6               | 0.3             | 4.678     | A                             |
|                            |       |            | 2    | 1      | 412                   | 103                     | 1286                         | 1185              | 0.347 | 415                 | 413                         | 1.1               | 0.7             | 7.009     | A                             |
|                            |       |            |      | 2      | 77                    | 19                      | 1286                         | 1185              | 0.065 | 77                  | 77                          | 0.2               | 0.2             | 6.896     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 211                   | 53                      | 1286                         | 1186              | 0.178 | 214                 | 216                         | 0.4               | 0.2             | 4.684     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 197                   | 49                      | 1314                         | 898               | 0.219 | 197                 | 192                         | 0.5               | 0.4             | 6.865     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 148                   | 37                      | 1314                         | 898               | 0.164 | 149                 | 149                         | 0.3               | 0.3             | 6.948     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 342                   | 85                      | 1314                         | 898               | 0.381 | 343                 | 348                         | 1.0               | 0.6             | 6.753     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 197                   | 49                      | -                            | -                 | -     | 197                 | 192                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 342                   | 85                      | -                            | -                 | -     | 342                 | 346                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 148                   | 37                      | -                            | -                 | -     | 148                 | 149                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 32                    | 8                       | 1080                         | 740               | 0.044 | 32                  | 32                          | 0.1               | 0.1             | 7.324     | A                             |
|                            |       |            |      | 2      | 241                   | 60                      | 1086                         | 742               | 0.324 | 240                 | 243                         | 0.7               | 0.4             | 6.391     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev, SAT

## Data Errors and Warnings

| Severity | Area            | Item                                     | Description                                                                                                      |
|----------|-----------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry        | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Info     | Lane Simulation | A1 [Lane Simulation]                     | This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.   |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 10.88              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 10.88             | B           |

## 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 |
|----|---------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D6 | 2026 Base + Com Dev | SAT              | ONE HOUR             | 11:15              | 12:45               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 602                     | 100.000            |
| 2 - Hambleton Road (south) |            | ONE HOUR     | ✓            | 1390                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 687                     | 100.000            |
| 4 - Hambleton Road (north) |            | ONE HOUR     | ✓            | 719                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 368                        | 168                | 66                         |
|      | 2 - Hambleton Road (south) | 405             | 27                         | 314                | 644                        |
|      | 3 - Elettra Avenue         | 199             | 330                        | 0                  | 158                        |
|      | 4 - Hambleton Road (north) | 25              | 525                        | 132                | 37                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 4                          | 1                  | 0                          |
|      | 2 - Hambleton Road (south) | 3               | 0                          | 1                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 0                          | 0                  | 1                          |
|      | 4 - Hambleton Road (north) | 4               | 1                          | 0                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 24.10         | 5.0             | C       | 550                     | 825                           |
| 2 - Hambleton Road (south) | 7.83          | 3.3             | A       | 1273                    | 1910                          |
| 3 - Elettra Avenue         | 8.27          | 1.9             | A       | 630                     | 946                           |
| 4 - Hambleton Road (north) | 8.22          | 2.0             | A       | 661                     | 991                           |

## Main Results for each time segment

## 11:15 - 11:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 453                   | 113                     | 797                       | 458                 | 452                         | 469                             | 0.0               | 0.9             | 8.777     | A                             |
| 2 - Hambleton Road (south) | 1050                  | 262                     | 305                       | 1047                | 1040                        | 951                             | 0.0               | 1.4             | 4.616     | A                             |
| 3 - Elettra Avenue         | 517                   | 129                     | 894                       | 518                 | 519                         | 458                             | 0.0               | 0.7             | 5.069     | A                             |
| 4 - Hambleton Road (north) | 541                   | 135                     | 725                       | 542                 | 543                         | 687                             | 0.0               | 0.8             | 5.328     | A                             |

## 11:30 - 11:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 536                   | 134                     | 950                       | 538                 | 533                         | 561                             | 0.9               | 1.5             | 10.944    | B                             |
| 2 - Hambleton Road (south) | 1253                  | 313                     | 359                       | 1252                | 1247                        | 1130                            | 1.4               | 1.9             | 5.531     | A                             |
| 3 - Elettra Avenue         | 608                   | 152                     | 1065                      | 607                 | 612                         | 546                             | 0.7               | 1.1             | 5.988     | A                             |
| 4 - Hambleton Road (north) | 650                   | 163                     | 865                       | 646                 | 643                         | 806                             | 0.8               | 1.3             | 5.976     | A                             |

## 11:45 - 12:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 659                   | 165                     | 1151                      | 656                 | 649                         | 691                             | 1.5               | 3.8             | 19.639    | C                             |
| 2 - Hambleton Road (south) | 1539                  | 385                     | 444                       | 1541                | 1526                        | 1363                            | 1.9               | 3.2             | 7.515     | A                             |
| 3 - Elettra Avenue         | 760                   | 190                     | 1299                      | 758                 | 753                         | 686                             | 1.1               | 1.9             | 7.974     | A                             |
| 4 - Hambleton Road (north) | 785                   | 196                     | 1061                      | 782                 | 788                         | 997                             | 1.3               | 2.0             | 7.998     | A                             |

## 12:00 - 12:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 664                   | 166                     | 1177                      | 655                 | 661                         | 698                             | 3.8               | 5.0             | 24.100    | C                             |
| 2 - Hambleton Road (south) | 1531                  | 383                     | 438                       | 1538                | 1542                        | 1394                            | 3.2               | 3.3             | 7.833     | A                             |
| 3 - Elettra Avenue         | 758                   | 189                     | 1306                      | 761                 | 761                         | 670                             | 1.9               | 1.7             | 8.267     | A                             |
| 4 - Hambleton Road (north) | 796                   | 199                     | 1074                      | 801                 | 797                         | 994                             | 2.0               | 1.7             | 8.224     | A                             |

## 12:15 - 12:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 542                   | 135                     | 959                       | 538                 | 554                         | 561                             | 5.0               | 1.8             | 13.064    | B                             |
| 2 - Hambleton Road (south) | 1223                  | 306                     | 372                       | 1228                | 1240                        | 1125                            | 3.3               | 1.9             | 5.579     | A                             |
| 3 - Elettra Avenue         | 626                   | 157                     | 1056                      | 625                 | 628                         | 544                             | 1.7               | 1.1             | 6.164     | A                             |
| 4 - Hambleton Road (north) | 653                   | 163                     | 865                       | 656                 | 659                         | 816                             | 1.7               | 0.9             | 6.374     | A                             |

## 12:30 - 12:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 447                   | 112                     | 791                       | 451                 | 458                         | 468                             | 1.8               | 0.8             | 8.928     | A                             |
| 2 - Hambleton Road (south) | 1045                  | 261                     | 292                       | 1045                | 1056                        | 950                             | 1.9               | 1.4             | 4.674     | A                             |
| 3 - Elettra Avenue         | 514                   | 129                     | 890                       | 518                 | 521                         | 446                             | 1.1               | 0.6             | 5.173     | A                             |
| 4 - Hambleton Road (north) | 539                   | 135                     | 718                       | 541                 | 539                         | 690                             | 0.9               | 0.7             | 5.387     | A                             |

## Lane Results

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

## Lanes: Main Results for each time segment

## 11:15 - 11:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 170                   | 609               | 0.280 | 170                 | 168                         | 0.0               | 0.3             | 7.537     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 283                   | 609               | 0.465 | 288                 | 285                         | 0.0               | 0.6             | 8.867     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 453                   |                   |       | 454                 | 456                         | 0.0               | 0.0             | 0.396     | A                             |
|                            | Exit  | 1          | 1    |                  | 469                   |                   |       | 469                 | 474                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 500                   | 1168              | 0.428 | 499                 | 495                         | 0.0               | 0.6             | 4.385     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 550                   | 1168              | 0.471 | 548                 | 545                         | 0.0               | 0.9             | 4.828     | A                             |
|                            | Exit  | 1          | 1    |                  | 951                   |                   |       | 951                 | 941                         | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 263                   | 972               | 0.270 | 264                 | 271                         | 0.0               | 0.4             | 5.283     | A                             |
|                            |       |            | 2    | 2, 3             | 254                   | 972               | 0.261 | 254                 | 247                         | 0.0               | 0.4             | 4.834     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 517                   |                   |       | 517                 | 522                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 458                   |                   |       | 458                 | 459                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 236                   | 845               | 0.280 | 237                 | 238                         | 0.0               | 0.3             | 5.081     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 305                   | 845               | 0.361 | 306                 | 305                         | 0.0               | 0.5             | 5.519     | A                             |
|                            | Exit  | 1          | 1    |                  | 687                   |                   |       | 687                 | 680                         | 0.0               | 0.0             | 0.000     | A                             |

## 11:30 - 11:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 211                   | 563               | 0.375 | 212                 | 207                         | 0.3               | 0.5             | 8.412     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 325                   | 563               | 0.577 | 326                 | 326                         | 0.6               | 0.9             | 10.743    | B                             |
|                            | Exit  | 1          | 1    | (1, 2, 3, 4)     | 536                   |                   |       | 536                 | 535                         | 0.0               | 0.1             | 1.093     | A                             |
|                            |       |            | 1    |                  | 561                   |                   |       | 561                 | 565                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 600                   | 1148              | 0.522 | 599                 | 595                         | 0.6               | 0.8             | 5.274     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 653                   | 1148              | 0.569 | 653                 | 653                         | 0.9               | 1.0             | 5.768     | A                             |
|                            | Exit  | 1          | 1    |                  | 1130                  |                   |       | 1130                | 1117                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 310                   | 907               | 0.342 | 309                 | 318                         | 0.4               | 0.6             | 6.082     | A                             |
|                            |       |            | 2    | 2, 3             | 298                   | 907               | 0.329 | 298                 | 295                         | 0.4               | 0.5             | 5.888     | A                             |
|                            |       |            | 2    | (1, 2, 3, 4)     | 608                   |                   |       | 608                 | 614                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 546                   |                   |       | 546                 | 545                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 293                   | 798               | 0.367 | 291                 | 285                         | 0.3               | 0.5             | 5.652     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 358                   | 798               | 0.448 | 355                 | 359                         | 0.5               | 0.8             | 6.231     | A                             |
|                            | Exit  | 1          | 1    |                  | 806                   |                   |       | 806                 | 810                         | 0.0               | 0.0             | 0.000     | A                             |

## 11:45 - 12:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 267                   | 502               | 0.531 | 265                 | 266                         | 0.5               | 0.9             | 11.513    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 391                   | 502               | 0.779 | 390                 | 384                         | 0.9               | 1.7             | 15.191    | C                             |
|                            |       |            | 2    | (1, 2, 3, 4)     | 659                   |                   |       | 658                 | 654                         | 0.1               | 1.2             | 5.887     | A                             |
|                            | Exit  | 1          | 1    |                  | 691                   |                   |       | 691                 | 685                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 744                   | 1115              | 0.668 | 747                 | 736                         | 0.8               | 1.5             | 7.147     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 794                   | 1115              | 0.712 | 794                 | 790                         | 1.0               | 1.7             | 7.861     | A                             |
|                            | Exit  | 1          | 1    |                  | 1363                  |                   |       | 1363                | 1363                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 391                   | 817               | 0.479 | 392                 | 391                         | 0.6               | 1.0             | 8.365     | A                             |
|                            |       |            | 2    | 2, 3             | 369                   | 817               | 0.451 | 367                 | 362                         | 0.5               | 0.9             | 7.550     | A                             |
|                            |       |            | 2    | (1, 2, 3, 4)     | 760                   |                   |       | 760                 | 756                         | 0.0               | 0.0             | 0.002     | A                             |
|                            | Exit  | 1          | 1    |                  | 686                   |                   |       | 686                 | 670                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 356                   | 733               | 0.486 | 355                 | 357                         | 0.5               | 0.8             | 7.475     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 429                   | 733               | 0.585 | 427                 | 431                         | 0.8               | 1.1             | 8.429     | A                             |
|                            | Exit  | 1          | 1    |                  | 997                   |                   |       | 997                 | 998                         | 0.0               | 0.0             | 0.000     | A                             |

## 12:00 - 12:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 272                   | 494               | 0.550 | 271                 | 271                         | 0.9               | 1.0             | 12.643    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 387                   | 494               | 0.783 | 384                 | 390                         | 1.7               | 1.9             | 16.038    | C                             |
|                            |       |            | 2    | (1, 2, 3, 4)     | 664                   |                   |       | 659                 | 662                         | 1.2               | 2.2             | 9.416     | A                             |
|                            | Exit  | 1          | 1    |                  | 698                   |                   |       | 698                 | 695                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 735                   | 1117              | 0.658 | 738                 | 744                         | 1.5               | 1.5             | 7.417     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 796                   | 1117              | 0.713 | 800                 | 797                         | 1.7               | 1.8             | 8.225     | A                             |
|                            | Exit  | 1          | 1    |                  | 1394                  |                   |       | 1394                | 1385                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 387                   | 814               | 0.476 | 390                 | 394                         | 1.0               | 0.8             | 8.491     | A                             |
|                            |       |            | 2    | 2, 3             | 371                   | 814               | 0.455 | 371                 | 367                         | 0.9               | 0.9             | 8.028     | A                             |
|                            |       |            | 2    | (1, 2, 3, 4)     | 758                   |                   |       | 758                 | 760                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 670                   |                   |       | 670                 | 678                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 366                   | 729               | 0.502 | 366                 | 363                         | 0.8               | 0.8             | 7.663     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 430                   | 729               | 0.590 | 435                 | 434                         | 1.1               | 0.9             | 8.692     | A                             |
|                            | Exit  | 1          | 1    |                  | 994                   |                   |       | 994                 | 1002                        | 0.0               | 0.0             | 0.000     | A                             |

## 12:15 - 12:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 206                   | 560               | 0.368 | 207                 | 216                         | 1.0               | 0.5             | 9.342     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 334                   | 560               | 0.596 | 331                 | 338                         | 1.9               | 1.1             | 11.886    | B                             |
|                            |       |            | 2    | (1, 2, 3, 4)     | 542                   |                   |       | 541                 | 548                         | 2.2               | 0.2             | 2.286     | A                             |
|                            | Exit  | 1          | 1    |                  | 561                   |                   |       | 561                 | 559                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 585                   | 1143              | 0.512 | 587                 | 593                         | 1.5               | 0.8             | 5.246     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 639                   | 1143              | 0.559 | 641                 | 647                         | 1.8               | 1.0             | 5.889     | A                             |
|                            | Exit  | 1          | 1    |                  | 1125                  |                   |       | 1125                | 1142                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 319                   | 910               | 0.351 | 319                 | 321                         | 0.8               | 0.5             | 6.460     | A                             |
|                            |       |            | 2    | 2, 3             | 307                   | 910               | 0.338 | 306                 | 306                         | 0.9               | 0.5             | 5.855     | A                             |
|                            |       |            | 2    | (1, 2, 3, 4)     | 626                   |                   |       | 626                 | 625                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 544                   |                   |       | 544                 | 562                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 287                   | 798               | 0.360 | 288                 | 290                         | 0.8               | 0.4             | 6.005     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 365                   | 798               | 0.458 | 368                 | 368                         | 0.9               | 0.5             | 6.664     | A                             |
|                            | Exit  | 1          | 1    |                  | 816                   |                   |       | 816                 | 817                         | 0.0               | 0.0             | 0.000     | A                             |

12:30 - 12:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 169                   | 611               | 0.277 | 171                 | 172                         | 0.5               | 0.3             | 7.236     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 278                   | 611               | 0.455 | 280                 | 287                         | 1.1               | 0.6             | 9.086     | A                             |
|                            | Exit  | 1          | 1    | (1, 2, 3, 4)     | 447                   |                   |       | 448                 | 455                         | 0.2               | 0.0             | 0.539     | A                             |
|                            |       |            | 1    |                  | 468                   |                   |       | 468                 | 477                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 494                   | 1174              | 0.421 | 495                 | 496                         | 0.8               | 0.7             | 4.517     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 550                   | 1174              | 0.469 | 549                 | 559                         | 1.0               | 0.8             | 4.814     | A                             |
|                            | Exit  | 1          | 1    |                  | 950                   |                   |       | 950                 | 948                         | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 266                   | 973               | 0.274 | 269                 | 270                         | 0.5               | 0.3             | 5.276     | A                             |
|                            |       |            | 2    | 2, 3             | 248                   | 973               | 0.255 | 248                 | 251                         | 0.5               | 0.3             | 5.062     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 514                   |                   |       | 514                 | 519                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 446                   |                   |       | 446                 | 459                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 235                   | 847               | 0.277 | 236                 | 237                         | 0.4               | 0.3             | 5.045     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 304                   | 847               | 0.359 | 305                 | 302                         | 0.5               | 0.5             | 5.653     | A                             |
|                            | Exit  | 1          | 1    |                  | 690                   |                   |       | 690                 | 689                         | 0.0               | 0.0             | 0.000     | A                             |

## Lane movements: Main Results for each time segment

11:15 - 11:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 170                   | 43                      | 850                          | 611               | 0.279 | 170                 | 168                         | 0.0               | 0.3             | 7.537     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 108                   | 27                      | 850                          | 608               | 0.178 | 109                 | 109                         | 0.0               | 0.2             | 7.216     | A                             |
|                            |       |            |      | 3      | 123                   | 31                      | 850                          | 609               | 0.202 | 125                 | 126                         | 0.0               | 0.3             | 9.769     | A                             |
|                            |       |            |      | 4      | 52                    | 13                      | 850                          | 608               | 0.086 | 54                  | 50                          | 0.0               | 0.1             | 10.065    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 278                   | 70                      | -                            | -                 | -     | 279                 | 278                         | 0.0               | 0.0             | 0.259     | A                             |
|                            |       |            |      | 3      | 123                   | 31                      | -                            | -                 | -     | 123                 | 128                         | 0.0               | 0.0             | 0.594     | A                             |
|                            |       |            |      | 4      | 52                    | 13                      | -                            | -                 | -     | 52                  | 50                          | 0.0               | 0.0             | 0.627     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 237                   | 59                      | 1286                         | 1168              | 0.203 | 236                 | 233                         | 0.0               | 0.3             | 4.893     | A                             |
|                            |       |            |      | 4      | 263                   | 66                      | 1286                         | 1169              | 0.225 | 264                 | 262                         | 0.0               | 0.2             | 3.931     | A                             |
|                            |       | 2          | 1    | 1      | 303                   | 76                      | 1286                         | 1168              | 0.259 | 303                 | 302                         | 0.0               | 0.5             | 5.410     | A                             |
|                            |       |            |      | 2      | 19                    | 5                       | 1277                         | 1161              | 0.016 | 19                  | 19                          | 0.0               | 0.0             | 5.385     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 228                   | 57                      | 1286                         | 1168              | 0.196 | 227                 | 224                         | 0.0               | 0.4             | 4.012     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 149                   | 37                      | 1314                         | 971               | 0.153 | 149                 | 153                         | 0.0               | 0.2             | 5.292     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 114                   | 29                      | 1314                         | 972               | 0.117 | 115                 | 118                         | 0.0               | 0.2             | 5.272     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 254                   | 64                      | 1314                         | 973               | 0.261 | 254                 | 247                         | 0.0               | 0.4             | 4.834     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 17                    | 4                       | 1056                         | 819               | 0.021 | 18                  | 19                          | 0.0               | 0.0             | 5.925     | A                             |
|                            |       |            |      | 2      | 219                   | 55                      | 1086                         | 844               | 0.259 | 219                 | 219                         | 0.0               | 0.3             | 5.010     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 179                   | 45                      | 1086                         | 846               | 0.212 | 179                 | 179                         | 0.0               | 0.3             | 5.015     | A                             |
|                            |       |            |      | 3      | 97                    | 24                      | 1086                         | 845               | 0.115 | 98                  | 100                         | 0.0               | 0.2             | 6.237     | A                             |
|                            |       |            |      | 4      | 28                    | 7                       | 1079                         | 841               | 0.034 | 28                  | 26                          | 0.0               | 0.0             | 6.193     | A                             |

11:30 - 11:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 211                   | 53                      | 850                          | 564               | 0.375 | 212                 | 207                         | 0.3               | 0.5             | 8.412     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 116                   | 29                      | 850                          | 563               | 0.207 | 116                 | 119                         | 0.2               | 0.3             | 8.815     | A                             |
|                            |       |            |      | 3      | 147                   | 37                      | 850                          | 564               | 0.261 | 149                 | 147                         | 0.3               | 0.4             | 11.777    | B                             |
|                            |       |            |      | 4      | 62                    | 15                      | 850                          | 563               | 0.109 | 61                  | 61                          | 0.1               | 0.2             | 11.868    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 328                   | 82                      | -                            | -                 | -     | 328                 | 327                         | 0.0               | 0.1             | 0.812     | A                             |
|                            |       |            |      | 3      | 147                   | 37                      | -                            | -                 | -     | 147                 | 147                         | 0.0               | 0.1             | 1.418     | A                             |
|                            |       |            |      | 4      | 61                    | 15                      | -                            | -                 | -     | 62                  | 61                          | 0.0               | 0.0             | 1.757     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 281                   | 70                      | 1286                         | 1148              | 0.245 | 281                 | 280                         | 0.3               | 0.4             | 5.896     | A                             |
|                            |       |            |      | 4      | 318                   | 80                      | 1286                         | 1148              | 0.277 | 318                 | 314                         | 0.2               | 0.4             | 4.720     | A                             |
|                            |       |            | 2    | 1      | 365                   | 91                      | 1286                         | 1148              | 0.318 | 366                 | 364                         | 0.5               | 0.6             | 6.485     | A                             |
|                            |       |            |      | 2      | 25                    | 6                       | 1286                         | 1149              | 0.022 | 25                  | 24                          | 0.0               | 0.1             | 6.359     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 263                   | 66                      | 1286                         | 1148              | 0.229 | 263                 | 265                         | 0.4               | 0.3             | 4.743     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 177                   | 44                      | 1314                         | 909               | 0.195 | 176                 | 180                         | 0.2               | 0.3             | 6.066     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 132                   | 33                      | 1314                         | 908               | 0.146 | 132                 | 138                         | 0.2               | 0.3             | 6.102     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 298                   | 74                      | 1314                         | 906               | 0.329 | 298                 | 295                         | 0.4               | 0.5             | 5.888     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 177                   | 44                      | -                            | -                 | -     | 177                 | 180                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 298                   | 74                      | -                            | -                 | -     | 298                 | 295                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 132                   | 33                      | -                            | -                 | -     | 132                 | 138                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 19                    | 5                       | 1079                         | 792               | 0.024 | 19                  | 21                          | 0.0               | 0.0             | 6.572     | A                             |
|                            |       |            |      | 2      | 274                   | 68                      | 1086                         | 798               | 0.343 | 272                 | 264                         | 0.3               | 0.5             | 5.581     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 208                   | 52                      | 1086                         | 798               | 0.261 | 207                 | 209                         | 0.3               | 0.4             | 5.484     | A                             |
|                            |       |            |      | 3      | 116                   | 29                      | 1086                         | 799               | 0.145 | 116                 | 118                         | 0.2               | 0.2             | 7.252     | A                             |
|                            |       |            |      | 4      | 33                    | 8                       | 1086                         | 800               | 0.041 | 32                  | 32                          | 0.0               | 0.1             | 7.290     | A                             |

11:45 - 12:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 267                   | 67                      | 850                          | 503               | 0.531 | 265                 | 266                         | 0.5               | 0.9             | 11.513    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 133                   | 33                      | 850                          | 502               | 0.264 | 132                 | 131                         | 0.3               | 0.6             | 12.854    | B                             |
|                            |       |            |      | 3      | 186                   | 46                      | 850                          | 502               | 0.370 | 186                 | 181                         | 0.4               | 0.8             | 16.290    | C                             |
|                            |       |            |      | 4      | 73                    | 18                      | 850                          | 503               | 0.144 | 72                  | 72                          | 0.2               | 0.3             | 16.553    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 401                   | 100                     | -                            | -                 | -     | 400                 | 399                         | 0.1               | 0.7             | 5.262     | A                             |
|                            |       |            |      | 3      | 186                   | 47                      | -                            | -                 | -     | 186                 | 182                         | 0.1               | 0.3             | 6.787     | A                             |
|                            |       |            |      | 4      | 73                    | 18                      | -                            | -                 | -     | 73                  | 73                          | 0.0               | 0.1             | 6.956     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 350                   | 88                      | 1286                         | 1116              | 0.314 | 352                 | 344                         | 0.4               | 0.8             | 8.054     | A                             |
|                            |       |            |      | 4      | 394                   | 99                      | 1286                         | 1116              | 0.353 | 395                 | 391                         | 0.4               | 0.7             | 6.348     | A                             |
|                            |       |            | 2    | 1      | 451                   | 113                     | 1286                         | 1116              | 0.404 | 450                 | 442                         | 0.6               | 1.1             | 8.921     | A                             |
|                            |       |            |      | 2      | 30                    | 8                       | 1286                         | 1114              | 0.027 | 30                  | 29                          | 0.1               | 0.1             | 9.047     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 313                   | 78                      | 1286                         | 1115              | 0.280 | 314                 | 319                         | 0.3               | 0.5             | 6.309     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 214                   | 54                      | 1314                         | 816               | 0.262 | 214                 | 215                         | 0.3               | 0.6             | 8.270     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 177                   | 44                      | 1314                         | 816               | 0.217 | 178                 | 176                         | 0.3               | 0.4             | 8.483     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 369                   | 92                      | 1314                         | 817               | 0.451 | 367                 | 362                         | 0.5               | 0.9             | 7.550     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 214                   | 54                      | -                            | -                 | -     | 214                 | 216                         | 0.0               | 0.0             | 0.003     | A                             |
|                            |       |            |      | 2      | 369                   | 92                      | -                            | -                 | -     | 369                 | 364                         | 0.0               | 0.0             | 0.001     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 177                   | 44                      | -                            | -                 | -     | 177                 | 176                         | 0.0               | 0.0             | 0.003     | A                             |
|                            |       |            | 2    | 1      | 28                    | 7                       | 1079                         | 729               | 0.038 | 28                  | 27                          | 0.0               | 0.1             | 8.617     | A                             |
|                            |       |            |      | 2      | 329                   | 82                      | 1086                         | 733               | 0.448 | 327                 | 330                         | 0.5               | 0.8             | 7.382     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 242                   | 61                      | 1086                         | 732               | 0.331 | 242                 | 245                         | 0.4               | 0.5             | 7.338     | A                             |
|                            |       |            |      | 3      | 148                   | 37                      | 1086                         | 733               | 0.202 | 147                 | 145                         | 0.2               | 0.5             | 9.811     | A                             |
|                            |       |            |      | 4      | 38                    | 9                       | 1086                         | 735               | 0.052 | 38                  | 40                          | 0.1               | 0.1             | 9.981     | A                             |

12:00 - 12:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 272                   | 68                      | 850                          | 494               | 0.550 | 271                 | 271                         | 0.9               | 1.0             | 12.643    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 139                   | 35                      | 850                          | 492               | 0.282 | 137                 | 136                         | 0.6               | 0.6             | 13.751    | B                             |
|                            |       |            |      | 3      | 178                   | 44                      | 850                          | 494               | 0.360 | 175                 | 182                         | 0.8               | 0.9             | 17.360    | C                             |
|                            |       |            |      | 4      | 71                    | 18                      | 850                          | 495               | 0.144 | 72                  | 72                          | 0.3               | 0.3             | 16.858    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 412                   | 103                     | -                            | -                 | -     | 411                 | 407                         | 0.7               | 1.2             | 8.642     | A                             |
|                            |       |            |      | 3      | 181                   | 45                      | -                            | -                 | -     | 178                 | 183                         | 0.3               | 0.8             | 10.815    | B                             |
|                            |       |            |      | 4      | 70                    | 18                      | -                            | -                 | -     | 71                  | 72                          | 0.1               | 0.2             | 10.098    | B                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 341                   | 85                      | 1286                         | 1118              | 0.305 | 344                 | 346                         | 0.8               | 0.7             | 8.291     | A                             |
|                            |       |            |      | 4      | 394                   | 98                      | 1286                         | 1117              | 0.353 | 394                 | 398                         | 0.7               | 0.8             | 6.657     | A                             |
|                            |       |            | 2    | 1      | 453                   | 113                     | 1286                         | 1118              | 0.405 | 456                 | 451                         | 1.1               | 1.1             | 9.343     | A                             |
|                            |       |            |      | 2      | 31                    | 8                       | 1286                         | 1117              | 0.028 | 31                  | 31                          | 0.1               | 0.1             | 8.917     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 312                   | 78                      | 1286                         | 1118              | 0.279 | 313                 | 315                         | 0.5               | 0.6             | 6.592     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 215                   | 54                      | 1314                         | 812               | 0.264 | 216                 | 217                         | 0.6               | 0.4             | 8.437     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 173                   | 43                      | 1314                         | 814               | 0.212 | 174                 | 177                         | 0.4               | 0.4             | 8.558     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 371                   | 93                      | 1314                         | 815               | 0.455 | 371                 | 367                         | 0.9               | 0.9             | 8.028     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 215                   | 54                      | -                            | -                 | -     | 215                 | 217                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 371                   | 93                      | -                            | -                 | -     | 371                 | 367                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 173                   | 43                      | -                            | -                 | -     | 173                 | 177                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 26                    | 7                       | 1079                         | 726               | 0.036 | 26                  | 27                          | 0.1               | 0.1             | 8.550     | A                             |
|                            |       |            |      | 2      | 340                   | 85                      | 1086                         | 729               | 0.466 | 340                 | 336                         | 0.8               | 0.7             | 7.592     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 242                   | 61                      | 1086                         | 729               | 0.332 | 244                 | 244                         | 0.5               | 0.5             | 7.523     | A                             |
|                            |       |            |      | 3      | 148                   | 37                      | 1086                         | 728               | 0.203 | 151                 | 149                         | 0.5               | 0.3             | 10.173    | B                             |
|                            |       |            |      | 4      | 40                    | 10                      | 1086                         | 734               | 0.054 | 41                  | 40                          | 0.1               | 0.1             | 10.238    | B                             |

12:15 - 12:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 206                   | 52                      | 850                          | 561               | 0.368 | 207                 | 216                         | 1.0               | 0.5             | 9.342     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 118                   | 30                      | 850                          | 559               | 0.211 | 117                 | 118                         | 0.6               | 0.4             | 9.613     | A                             |
|                            |       |            |      | 3      | 155                   | 39                      | 850                          | 560               | 0.276 | 153                 | 158                         | 0.9               | 0.5             | 13.096    | B                             |
|                            |       |            |      | 4      | 62                    | 15                      | 850                          | 560               | 0.110 | 61                  | 61                          | 0.3               | 0.2             | 13.008    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 325                   | 81                      | -                            | -                 | -     | 324                 | 331                         | 1.2               | 0.1             | 1.913     | A                             |
|                            |       |            |      | 3      | 155                   | 39                      | -                            | -                 | -     | 155                 | 157                         | 0.8               | 0.1             | 2.762     | A                             |
|                            |       |            |      | 4      | 61                    | 15                      | -                            | -                 | -     | 62                  | 61                          | 0.2               | 0.0             | 3.034     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 268                   | 67                      | 1286                         | 1143              | 0.234 | 270                 | 280                         | 0.7               | 0.5             | 5.827     | A                             |
|                            |       |            |      | 4      | 317                   | 79                      | 1286                         | 1144              | 0.277 | 318                 | 313                         | 0.8               | 0.4             | 4.725     | A                             |
|                            |       |            | 2    | 1      | 356                   | 89                      | 1286                         | 1143              | 0.311 | 358                 | 358                         | 1.1               | 0.6             | 6.686     | A                             |
|                            |       |            |      | 2      | 22                    | 6                       | 1268                         | 1128              | 0.020 | 22                  | 23                          | 0.1               | 0.1             | 6.517     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 261                   | 65                      | 1286                         | 1144              | 0.228 | 261                 | 265                         | 0.6               | 0.4             | 4.776     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 179                   | 45                      | 1314                         | 912               | 0.196 | 178                 | 178                         | 0.4               | 0.3             | 6.438     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 140                   | 35                      | 1314                         | 912               | 0.154 | 140                 | 143                         | 0.4               | 0.2             | 6.487     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 307                   | 77                      | 1314                         | 910               | 0.337 | 306                 | 306                         | 0.9               | 0.5             | 5.855     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 179                   | 45                      | -                            | -                 | -     | 179                 | 178                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 307                   | 77                      | -                            | -                 | -     | 307                 | 305                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 140                   | 35                      | -                            | -                 | -     | 140                 | 142                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 25                    | 6                       | 1086                         | 797               | 0.031 | 25                  | 22                          | 0.1               | 0.0             | 6.870     | A                             |
|                            |       |            |      | 2      | 262                   | 66                      | 1086                         | 799               | 0.328 | 263                 | 268                         | 0.7               | 0.4             | 5.936     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 208                   | 52                      | 1086                         | 799               | 0.261 | 210                 | 210                         | 0.5               | 0.3             | 5.841     | A                             |
|                            |       |            |      | 3      | 120                   | 30                      | 1086                         | 799               | 0.150 | 121                 | 123                         | 0.3               | 0.2             | 7.762     | A                             |
|                            |       |            |      | 4      | 37                    | 9                       | 1086                         | 799               | 0.046 | 37                  | 35                          | 0.1               | 0.1             | 7.700     | A                             |

12:30 - 12:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 169                   | 42                      | 850                          | 610               | 0.277 | 171                 | 172                         | 0.5               | 0.3             | 7.236     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 110                   | 28                      | 850                          | 610               | 0.181 | 111                 | 110                         | 0.4               | 0.2             | 7.482     | A                             |
|                            |       |            |      | 3      | 121                   | 30                      | 850                          | 611               | 0.199 | 122                 | 127                         | 0.5               | 0.3             | 10.011    | B                             |
|                            |       |            |      | 4      | 46                    | 12                      | 850                          | 612               | 0.076 | 46                  | 50                          | 0.2               | 0.1             | 10.149    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 280                   | 70                      | -                            | -                 | -     | 280                 | 280                         | 0.1               | 0.0             | 0.384     | A                             |
|                            |       |            |      | 3      | 121                   | 30                      | -                            | -                 | -     | 121                 | 126                         | 0.1               | 0.0             | 0.797     | A                             |
|                            |       |            |      | 4      | 46                    | 12                      | -                            | -                 | -     | 46                  | 49                          | 0.0               | 0.0             | 0.730     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 230                   | 58                      | 1286                         | 1173              | 0.196 | 231                 | 235                         | 0.5               | 0.4             | 5.061     | A                             |
|                            |       |            |      | 4      | 264                   | 66                      | 1286                         | 1173              | 0.225 | 264                 | 261                         | 0.4               | 0.3             | 4.028     | A                             |
|                            |       |            | 2    | 1      | 298                   | 75                      | 1286                         | 1173              | 0.254 | 298                 | 308                         | 0.6               | 0.4             | 5.455     | A                             |
|                            |       |            |      | 2      | 22                    | 6                       | 1268                         | 1155              | 0.019 | 22                  | 21                          | 0.1               | 0.0             | 5.437     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 230                   | 57                      | 1286                         | 1173              | 0.196 | 229                 | 231                         | 0.4               | 0.3             | 3.920     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 147                   | 37                      | 1314                         | 972               | 0.152 | 149                 | 150                         | 0.3               | 0.2             | 5.231     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 119                   | 30                      | 1314                         | 973               | 0.122 | 120                 | 120                         | 0.2               | 0.1             | 5.332     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 248                   | 62                      | 1314                         | 973               | 0.255 | 248                 | 251                         | 0.5               | 0.3             | 5.062     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 147                   | 37                      | -                            | -                 | -     | 147                 | 149                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 248                   | 62                      | -                            | -                 | -     | 248                 | 250                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 119                   | 30                      | -                            | -                 | -     | 119                 | 120                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 21                    | 5                       | 1079                         | 836               | 0.025 | 21                  | 20                          | 0.0               | 0.0             | 6.002     | A                             |
|                            |       |            |      | 2      | 214                   | 54                      | 1086                         | 847               | 0.253 | 215                 | 217                         | 0.4               | 0.3             | 4.960     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev, PM

### Data Errors and Warnings

| Severity | Area            | Item                                     | Description                                                                                                      |
|----------|-----------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry        | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Info     | Lane Simulation | A1 [Lane Simulation]                     | This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.   |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 21.61              | C            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 21.61             | C           |

## 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 |
|----|---------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D8 | 2026 Base + Com Dev + Dev | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 476                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1719                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 1002                    | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 790                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 302                        | 127                | 47                         |
|      | 2 - Hambledon Road (south) | 528             | 102                        | 381                | 708                        |
|      | 3 - Elettra Avenue         | 248             | 557                        | 0                  | 197                        |
|      | 4 - Hambledon Road (north) | 43              | 592                        | 120                | 35                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 3               | 2                          | 0                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 1                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 2               | 3                          | 1                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 32.74         | 4.7             | D       | 443                     | 664                           |
| 2 - Hambledon Road (south) | 12.61         | 7.4             | B       | 1568                    | 2352                          |
| 3 - Elettra Avenue         | 32.76         | 9.2             | D       | 915                     | 1372                          |
| 4 - Hambledon Road (north) | 20.23         | 5.2             | C       | 727                     | 1091                          |

## Main Results for each time segment

## 16:30 - 16:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 367                   | 92                      | 1052                      | 367                 | 367                         | 615                             | 0.0               | 0.9             | 9.277     | A                             |
| 2 - Hambleton Road (south) | 1284                  | 321                     | 251                       | 1290                | 1296                        | 1168                            | 0.0               | 1.8             | 5.572     | A                             |
| 3 - Elettra Avenue         | 747                   | 187                     | 1067                      | 746                 | 749                         | 474                             | 0.0               | 1.5             | 7.140     | A                             |
| 4 - Hambleton Road (north) | 597                   | 149                     | 1072                      | 595                 | 595                         | 741                             | 0.0               | 1.2             | 6.940     | A                             |

## 16:45 - 17:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 439                   | 110                     | 1271                      | 438                 | 425                         | 739                             | 0.9               | 1.8             | 12.691    | B                             |
| 2 - Hambleton Road (south) | 1542                  | 386                     | 303                       | 1546                | 1538                        | 1406                            | 1.8               | 2.8             | 7.146     | A                             |
| 3 - Elettra Avenue         | 916                   | 229                     | 1281                      | 914                 | 909                         | 568                             | 1.5               | 2.8             | 9.865     | A                             |
| 4 - Hambleton Road (north) | 714                   | 179                     | 1302                      | 708                 | 716                         | 894                             | 1.2               | 2.1             | 9.108     | A                             |

## 17:00 - 17:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 535                   | 134                     | 1531                      | 532                 | 521                         | 893                             | 1.8               | 4.7             | 26.541    | D                             |
| 2 - Hambleton Road (south) | 1875                  | 469                     | 356                       | 1876                | 1878                        | 1707                            | 2.8               | 6.1             | 11.292    | B                             |
| 3 - Elettra Avenue         | 1086                  | 272                     | 1547                      | 1086                | 1073                        | 685                             | 2.8               | 8.8             | 23.019    | C                             |
| 4 - Hambleton Road (north) | 865                   | 216                     | 1559                      | 865                 | 854                         | 1074                            | 2.1               | 4.4             | 16.473    | C                             |

## 17:15 - 17:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 519                   | 130                     | 1564                      | 526                 | 526                         | 905                             | 4.7               | 4.6             | 32.735    | D                             |
| 2 - Hambleton Road (south) | 1901                  | 475                     | 366                       | 1890                | 1889                        | 1725                            | 6.1               | 7.4             | 12.607    | B                             |
| 3 - Elettra Avenue         | 1085                  | 271                     | 1560                      | 1107                | 1096                        | 696                             | 8.8               | 9.2             | 32.758    | D                             |
| 4 - Hambleton Road (north) | 875                   | 219                     | 1592                      | 877                 | 878                         | 1075                            | 4.4               | 5.2             | 20.225    | C                             |

## 17:30 - 17:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 426                   | 106                     | 1255                      | 428                 | 439                         | 732                             | 4.6               | 1.6             | 16.542    | C                             |
| 2 - Hambleton Road (south) | 1525                  | 381                     | 304                       | 1525                | 1556                        | 1379                            | 7.4               | 2.7             | 7.585     | A                             |
| 3 - Elettra Avenue         | 895                   | 224                     | 1263                      | 895                 | 921                         | 566                             | 9.2               | 2.8             | 13.849    | B                             |
| 4 - Hambleton Road (north) | 711                   | 178                     | 1276                      | 711                 | 729                         | 881                             | 5.2               | 1.7             | 10.663    | B                             |

## 17:45 - 18:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 370                   | 92                      | 1062                      | 370                 | 362                         | 614                             | 1.6               | 1.1             | 9.987     | A                             |
| 2 - Hambleton Road (south) | 1278                  | 320                     | 258                       | 1277                | 1297                        | 1174                            | 2.7               | 2.1             | 5.483     | A                             |
| 3 - Elettra Avenue         | 758                   | 190                     | 1055                      | 753                 | 763                         | 480                             | 2.8               | 1.8             | 7.576     | A                             |
| 4 - Hambleton Road (north) | 602                   | 150                     | 1073                      | 603                 | 601                         | 735                             | 1.7               | 1.2             | 7.092     | A                             |

## Lane Results

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

### Lanes: Main Results for each time segment

#### 16:30 - 16:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 138                   | 532               | 0.259 | 138                 | 139                         | 0.0               | 0.3             | 8.106     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 228                   | 532               | 0.429 | 229                 | 228                         | 0.0               | 0.6             | 9.575     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 367                   |                   |       | 366                 | 370                         | 0.0               | 0.0             | 0.249     | A                             |
|                            | Exit  | 1          | 1    |                  | 615                   |                   |       | 615                 | 613                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 587                   | 1189              | 0.494 | 591                 | 592                         | 0.0               | 0.7             | 4.985     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 697                   | 1189              | 0.586 | 699                 | 704                         | 0.0               | 1.1             | 6.073     | A                             |
|                            | Exit  | 1          | 1    |                  | 1168                  |                   |       | 1168                | 1174                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 336                   | 906               | 0.371 | 335                 | 335                         | 0.0               | 0.5             | 6.378     | A                             |
|                            |       |            | 2    | 2, 3             | 411                   | 906               | 0.454 | 411                 | 415                         | 0.0               | 1.0             | 7.756     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 747                   |                   |       | 747                 | 755                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 474                   |                   |       | 474                 | 473                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 279                   | 729               | 0.383 | 278                 | 275                         | 0.0               | 0.5             | 6.528     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 317                   | 729               | 0.435 | 316                 | 321                         | 0.0               | 0.7             | 7.289     | A                             |
|                            | Exit  | 1          | 1    |                  | 741                   |                   |       | 741                 | 748                         | 0.0               | 0.0             | 0.000     | A                             |

#### 16:45 - 17:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 175                   | 466               | 0.376 | 176                 | 168                         | 0.3               | 0.6             | 10.478    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 264                   | 466               | 0.567 | 263                 | 257                         | 0.6               | 1.1             | 12.558    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 439                   |                   |       | 440                 | 429                         | 0.0               | 0.1             | 0.932     | A                             |
|                            | Exit  | 1          | 1    |                  | 739                   |                   |       | 739                 | 739                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 715                   | 1169              | 0.611 | 715                 | 710                         | 0.7               | 1.1             | 6.632     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 828                   | 1169              | 0.708 | 831                 | 829                         | 1.1               | 1.7             | 7.593     | A                             |
|                            | Exit  | 1          | 1    |                  | 1406                  |                   |       | 1406                | 1404                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 410                   | 824               | 0.498 | 406                 | 404                         | 0.5               | 1.1             | 8.404     | A                             |
|                            |       |            | 2    | 2, 3             | 506                   | 824               | 0.614 | 508                 | 505                         | 1.0               | 1.6             | 11.024    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 916                   |                   |       | 916                 | 914                         | 0.0               | 0.0             | 0.010     | A                             |
|                            | Exit  | 1          | 1    |                  | 568                   |                   |       | 568                 | 559                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 339                   | 653               | 0.519 | 336                 | 334                         | 0.5               | 0.9             | 8.813     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 375                   | 653               | 0.574 | 372                 | 382                         | 0.7               | 1.2             | 9.364     | A                             |
|                            | Exit  | 1          | 1    |                  | 894                   |                   |       | 894                 | 887                         | 0.0               | 0.0             | 0.000     | A                             |

#### 17:00 - 17:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 228                   | 388               | 0.589 | 227                 | 219                         | 0.6               | 1.1             | 15.345    | C                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 308                   | 388               | 0.794 | 304                 | 303                         | 1.1               | 1.9             | 19.011    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 535                   |                   |       | 536                 | 526                         | 0.1               | 1.7             | 8.941     | A                             |
|                            | Exit  | 1          | 1    |                  | 893                   |                   |       | 893                 | 892                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 897                   | 1149              | 0.781 | 897                 | 899                         | 1.1               | 2.5             | 10.101    | B                             |
|                            |       |            | 2    | 1, 2, 4          | 979                   | 1149              | 0.852 | 979                 | 979                         | 1.7               | 3.6             | 12.403    | B                             |
|                            | Exit  | 1          | 1    |                  | 1707                  |                   |       | 1707                | 1674                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 477                   | 722               | 0.661 | 483                 | 484                         | 1.1               | 2.1             | 15.106    | C                             |
|                            |       |            | 2    | 2, 3             | 611                   | 722               | 0.847 | 603                 | 590                         | 1.6               | 5.3             | 24.492    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 1086                  |                   |       | 1088                | 1092                        | 0.0               | 1.4             | 2.638     | A                             |
|                            | Exit  | 1          | 1    |                  | 685                   |                   |       | 685                 | 687                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 417                   | 567               | 0.735 | 419                 | 412                         | 0.9               | 1.9             | 15.687    | C                             |
|                            |       |            | 2    | 2, 3, 4          | 447                   | 567               | 0.789 | 447                 | 443                         | 1.2               | 2.5             | 17.196    | C                             |
|                            | Exit  | 1          | 1    |                  | 1074                  |                   |       | 1074                | 1074                        | 0.0               | 0.0             | 0.000     | A                             |

#### 17:15 - 17:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 224                   | 378               | 0.593 | 226                 | 223                         | 1.1               | 1.0             | 17.054    | C                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 298                   | 378               | 0.788 | 300                 | 303                         | 1.9               | 1.7             | 21.666    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 519                   |                   |       | 522                 | 525                         | 1.7               | 1.8             | 12.974    | B                             |
|                            | Exit  | 1          | 1    |                  | 905                   |                   |       | 905                 | 899                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 904                   | 1145              | 0.789 | 898                 | 903                         | 2.5               | 3.2             | 11.248    | B                             |
|                            |       |            | 2    | 1, 2, 4          | 997                   | 1145              | 0.871 | 992                 | 987                         | 3.6               | 4.2             | 13.874    | B                             |
|                            | Exit  | 1          | 1    |                  | 1725                  |                   |       | 1725                | 1724                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 486                   | 717               | 0.677 | 483                 | 482                         | 2.1               | 2.7             | 17.486    | C                             |
|                            |       |            | 2    | 2, 3             | 614                   | 717               | 0.856 | 624                 | 614                         | 5.3               | 4.8             | 31.412    | D                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 1085                  |                   |       | 1099                | 1096                        | 1.4               | 1.8             | 7.454     | A                             |
|                            | Exit  | 1          | 1    |                  | 696                   |                   |       | 696                 | 688                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 424                   | 556               | 0.762 | 425                 | 428                         | 1.9               | 2.5             | 19.313    | C                             |
|                            |       |            | 2    | 2, 3, 4          | 451                   | 556               | 0.811 | 453                 | 451                         | 2.5               | 2.7             | 21.088    | C                             |
|                            | Exit  | 1          | 1    |                  | 1075                  |                   |       | 1075                | 1079                        | 0.0               | 0.0             | 0.000     | A                             |

17:30 - 17:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 171                   | 471               | 0.363 | 171                 | 176                         | 1.0               | 0.5             | 12.063    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 256                   | 471               | 0.544 | 256                 | 263                         | 1.7               | 1.0             | 14.771    | B                             |
|                            | Exit  | 2          | 1    | (1, 2, 3, 4)     | 426                   |                   |       | 427                 | 434                         | 1.8               | 0.1             | 3.074     | A                             |
|                            |       |            | 1    |                  | 732                   |                   |       | 732                 | 749                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 709                   | 1169              | 0.607 | 709                 | 725                         | 3.2               | 1.2             | 6.835     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 816                   | 1169              | 0.698 | 816                 | 830                         | 4.2               | 1.6             | 8.251     | A                             |
|                            | Exit  | 1          | 1    |                  | 1379                  |                   |       | 1379                | 1423                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 400                   | 831               | 0.481 | 403                 | 411                         | 2.7               | 0.7             | 10.426    | B                             |
|                            |       |            | 2    | 2, 3             | 496                   | 831               | 0.597 | 491                 | 510                         | 4.8               | 2.1             | 14.580    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 895                   |                   |       | 896                 | 902                         | 1.8               | 0.0             | 1.383     | A                             |
|                            | Exit  | 1          | 1    |                  | 566                   |                   |       | 566                 | 577                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 330                   | 661               | 0.499 | 332                 | 343                         | 2.5               | 0.7             | 10.038    | B                             |
|                            |       |            | 2    | 2, 3, 4          | 381                   | 661               | 0.575 | 379                 | 386                         | 2.7               | 1.0             | 11.214    | B                             |
|                            | Exit  | 1          | 1    |                  | 881                   |                   |       | 881                 | 896                         | 0.0               | 0.0             | 0.000     | A                             |

17:45 - 18:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 139                   | 529               | 0.262 | 139                 | 137                         | 0.5               | 0.4             | 8.639     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 232                   | 529               | 0.438 | 232                 | 226                         | 1.0               | 0.7             | 10.264    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 370                   |                   |       | 370                 | 361                         | 0.1               | 0.0             | 0.345     | A                             |
|                            | Exit  | 1          | 1    |                  | 614                   |                   |       | 614                 | 613                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 582                   | 1186              | 0.490 | 581                 | 593                         | 1.2               | 0.8             | 5.104     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 697                   | 1186              | 0.587 | 695                 | 704                         | 1.6               | 1.3             | 5.809     | A                             |
|                            | Exit  | 1          | 1    |                  | 1174                  |                   |       | 1174                | 1179                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 336                   | 910               | 0.370 | 334                 | 337                         | 0.7               | 0.8             | 6.860     | A                             |
|                            |       |            | 2    | 2, 3             | 422                   | 910               | 0.463 | 419                 | 426                         | 2.1               | 1.0             | 8.142     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 758                   |                   |       | 758                 | 759                         | 0.0               | 0.0             | 0.005     | A                             |
|                            | Exit  | 1          | 1    |                  | 480                   |                   |       | 480                 | 480                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 277                   | 729               | 0.380 | 278                 | 276                         | 0.7               | 0.5             | 6.858     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 325                   | 729               | 0.446 | 325                 | 325                         | 1.0               | 0.8             | 7.289     | A                             |
|                            | Exit  | 1          | 1    |                  | 735                   |                   |       | 735                 | 752                         | 0.0               | 0.0             | 0.000     | A                             |

## Lane movements: Main Results for each time segment

16:30 - 16:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 138                   | 34                      | 850                          | 534               | 0.258 | 138                 | 139                         | 0.0               | 0.3             | 8.106     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 98                    | 25                      | 850                          | 534               | 0.184 | 98                  | 98                          | 0.0               | 0.2             | 8.173     | A                             |
|                            |       |            |      | 3      | 94                    | 23                      | 850                          | 533               | 0.176 | 95                  | 95                          | 0.0               | 0.3             | 10.733    | B                             |
|                            |       |            |      | 4      | 36                    | 9                       | 850                          | 532               | 0.068 | 36                  | 35                          | 0.0               | 0.1             | 10.216    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 236                   | 59                      | -                            | -                 | -     | 236                 | 239                         | 0.0               | 0.0             | 0.175     | A                             |
|                            |       |            |      | 3      | 94                    | 23                      | -                            | -                 | -     | 94                  | 96                          | 0.0               | 0.0             | 0.370     | A                             |
|                            |       |            |      | 4      | 36                    | 9                       | -                            | -                 | -     | 36                  | 35                          | 0.0               | 0.0             | 0.402     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 284                   | 71                      | 1286                         | 1189              | 0.239 | 286                 | 287                         | 0.0               | 0.4             | 5.481     | A                             |
|                            |       |            |      | 4      | 303                   | 76                      | 1286                         | 1189              | 0.255 | 305                 | 306                         | 0.0               | 0.3             | 4.514     | A                             |
|                            |       | 2          | 1    | 1      | 397                   | 99                      | 1286                         | 1189              | 0.334 | 398                 | 396                         | 0.0               | 0.9             | 6.847     | A                             |
|                            |       |            |      | 2      | 79                    | 20                      | 1286                         | 1190              | 0.066 | 78                  | 78                          | 0.0               | 0.1             | 6.595     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 221                   | 55                      | 1286                         | 1189              | 0.186 | 223                 | 230                         | 0.0               | 0.1             | 4.588     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 186                   | 47                      | 1314                         | 907               | 0.206 | 185                 | 185                         | 0.0               | 0.3             | 6.473     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 150                   | 37                      | 1314                         | 907               | 0.165 | 151                 | 149                         | 0.0               | 0.2             | 6.259     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 411                   | 103                     | 1314                         | 906               | 0.454 | 411                 | 415                         | 0.0               | 1.0             | 7.756     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 186                   | 47                      | -                            | -                 | -     | 186                 | 187                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 411                   | 103                     | -                            | -                 | -     | 411                 | 419                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 150                   | 37                      | -                            | -                 | -     | 150                 | 150                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 32                    | 8                       | 1086                         | 733               | 0.043 | 31                  | 31                          | 0.0               | 0.1             | 7.235     | A                             |
|                            |       |            |      | 2      | 247                   | 62                      | 1086                         | 730               | 0.339 | 247                 | 243                         | 0.0               | 0.4             | 6.436     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 197                   | 49                      | 1086                         | 731               | 0.269 | 196                 | 201                         | 0.0               | 0.4             | 6.561     | A                             |
|                            |       |            |      | 3      | 94                    | 23                      | 1086                         | 727               | 0.129 | 93                  | 92                          | 0.0               | 0.2             | 8.462     | A                             |
|                            |       |            |      | 4      | 27                    | 7                       | 1086                         | 732               | 0.036 | 27                  | 28                          | 0.0               | 0.1             | 8.529     | A                             |

16:45 - 17:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 175                   | 44                      | 850                          | 465               | 0.378 | 176                 | 168                         | 0.3               | 0.6             | 10.478    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 99                    | 25                      | 850                          | 464               | 0.213 | 100                 | 102                         | 0.2               | 0.3             | 10.677    | B                             |
|                            |       |            |      | 3      | 123                   | 31                      | 850                          | 466               | 0.264 | 122                 | 115                         | 0.3               | 0.5             | 13.673    | B                             |
|                            |       |            |      | 4      | 42                    | 11                      | 850                          | 467               | 0.090 | 41                  | 40                          | 0.1               | 0.2             | 13.975    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 274                   | 69                      | -                            | -                 | -     | 274                 | 272                         | 0.0               | 0.0             | 0.665     | A                             |
|                            |       |            |      | 3      | 123                   | 31                      | -                            | -                 | -     | 123                 | 116                         | 0.0               | 0.0             | 1.377     | A                             |
|                            |       |            |      | 4      | 42                    | 11                      | -                            | -                 | -     | 42                  | 41                          | 0.0               | 0.0             | 1.392     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 337                   | 84                      | 1286                         | 1170              | 0.288 | 338                 | 338                         | 0.4               | 0.6             | 7.427     | A                             |
|                            |       |            |      | 4      | 377                   | 94                      | 1286                         | 1170              | 0.322 | 377                 | 372                         | 0.3               | 0.5             | 5.903     | A                             |
|                            |       |            | 2    | 1      | 474                   | 118                     | 1286                         | 1169              | 0.405 | 474                 | 473                         | 0.9               | 1.2             | 8.428     | A                             |
|                            |       |            |      | 2      | 91                    | 23                      | 1286                         | 1172              | 0.077 | 92                  | 91                          | 0.1               | 0.2             | 8.272     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 264                   | 66                      | 1286                         | 1170              | 0.225 | 265                 | 264                         | 0.1               | 0.3             | 5.889     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 229                   | 57                      | 1314                         | 822               | 0.279 | 228                 | 226                         | 0.3               | 0.7             | 8.429     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 181                   | 45                      | 1314                         | 821               | 0.220 | 179                 | 178                         | 0.2               | 0.5             | 8.371     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 506                   | 126                     | 1314                         | 824               | 0.614 | 508                 | 505                         | 1.0               | 1.6             | 11.024    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 229                   | 57                      | -                            | -                 | -     | 229                 | 228                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 506                   | 126                     | -                            | -                 | -     | 506                 | 508                         | 0.0               | 0.0             | 0.014     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 181                   | 45                      | -                            | -                 | -     | 181                 | 179                         | 0.0               | 0.0             | 0.012     | A                             |
|                            |       |            | 2    | 1      | 37                    | 9                       | 1086                         | 650               | 0.057 | 37                  | 40                          | 0.1               | 0.1             | 10.374    | B                             |
|                            |       |            |      | 2      | 302                   | 75                      | 1086                         | 652               | 0.463 | 299                 | 294                         | 0.4               | 0.8             | 8.603     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

17:00 - 17:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 228                   | 57                      | 850                          | 388               | 0.587 | 227                 | 219                         | 0.6               | 1.1             | 15.345    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 115                   | 29                      | 850                          | 388               | 0.297 | 114                 | 113                         | 0.3               | 0.7             | 16.524    | C                             |
|                            |       |            |      | 3      | 137                   | 34                      | 850                          | 387               | 0.355 | 135                 | 136                         | 0.5               | 0.9             | 20.263    | C                             |
|                            |       |            |      | 4      | 55                    | 14                      | 850                          | 388               | 0.142 | 55                  | 53                          | 0.2               | 0.3             | 20.922    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 343                   | 86                      | -                            | -                 | -     | 343                 | 335                         | 0.0               | 1.0             | 8.103     | A                             |
|                            |       |            |      | 3      | 136                   | 34                      | -                            | -                 | -     | 137                 | 138                         | 0.0               | 0.5             | 9.897     | A                             |
|                            |       |            |      | 4      | 55                    | 14                      | -                            | -                 | -     | 55                  | 54                          | 0.0               | 0.2             | 11.519    | B                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 420                   | 105                     | 1286                         | 1149              | 0.365 | 421                 | 421                         | 0.6               | 1.2             | 10.891    | B                             |
|                            |       |            |      | 4      | 478                   | 119                     | 1286                         | 1150              | 0.415 | 476                 | 478                         | 0.5               | 1.3             | 9.398     | A                             |
|                            |       |            | 2    | 1      | 575                   | 144                     | 1286                         | 1150              | 0.500 | 575                 | 572                         | 1.2               | 2.2             | 13.697    | B                             |
|                            |       |            |      | 2      | 113                   | 28                      | 1286                         | 1149              | 0.098 | 112                 | 110                         | 0.2               | 0.5             | 13.662    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 291                   | 73                      | 1286                         | 1148              | 0.254 | 292                 | 297                         | 0.3               | 0.8             | 9.488     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 266                   | 67                      | 1314                         | 724               | 0.368 | 269                 | 274                         | 0.7               | 1.2             | 15.290    | C                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 211                   | 53                      | 1314                         | 724               | 0.291 | 214                 | 209                         | 0.5               | 0.9             | 14.861    | B                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 611                   | 153                     | 1314                         | 721               | 0.848 | 603                 | 590                         | 1.6               | 5.3             | 24.492    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 266                   | 66                      | -                            | -                 | -     | 266                 | 277                         | 0.0               | 0.3             | 2.444     | A                             |
|                            |       |            |      | 2      | 609                   | 152                     | -                            | -                 | -     | 611                 | 605                         | 0.0               | 0.7             | 2.753     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 212                   | 53                      | -                            | -                 | -     | 211                 | 211                         | 0.0               | 0.3             | 2.566     | A                             |
|                            |       |            | 2    | 1      | 49                    | 12                      | 1086                         | 570               | 0.086 | 48                  | 46                          | 0.1               | 0.3             | 18.035    | C                             |
|                            |       |            |      | 2      | 368                   | 92                      | 1086                         | 567               | 0.649 | 370                 | 366                         | 0.8               | 1.6             | 15.386    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 279                   | 70                      | 1086                         | 567               | 0.492 | 281                 | 276                         | 0.7               | 1.3             | 15.726    | C                             |
|                            |       |            |      | 3      | 130                   | 32                      | 1086                         | 566               | 0.229 | 128                 | 130                         | 0.4               | 0.9             | 19.561    | C                             |
|                            |       |            |      | 4      | 38                    | 10                      | 1086                         | 569               | 0.067 | 37                  | 37                          | 0.1               | 0.3             | 19.513    | C                             |

17:15 - 17:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 224                   | 56                      | 850                          | 377               | 0.594 | 226                 | 223                         | 1.1               | 1.0             | 17.054    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 107                   | 27                      | 850                          | 378               | 0.283 | 108                 | 112                         | 0.7               | 0.5             | 18.517    | C                             |
|                            |       |            |      | 3      | 142                   | 35                      | 850                          | 379               | 0.373 | 143                 | 139                         | 0.9               | 0.9             | 23.127    | C                             |
|                            |       |            |      | 4      | 50                    | 12                      | 850                          | 376               | 0.132 | 50                  | 52                          | 0.3               | 0.3             | 24.266    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 330                   | 82                      | -                            | -                 | -     | 331                 | 334                         | 1.0               | 1.1             | 11.635    | B                             |
|                            |       |            |      | 3      | 140                   | 35                      | -                            | -                 | -     | 142                 | 139                         | 0.5               | 0.6             | 14.795    | B                             |
|                            |       |            |      | 4      | 49                    | 12                      | -                            | -                 | -     | 50                  | 52                          | 0.2               | 0.2             | 16.414    | C                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 421                   | 105                     | 1286                         | 1145              | 0.368 | 419                 | 417                         | 1.2               | 1.5             | 12.014    | B                             |
|                            |       |            |      | 4      | 483                   | 121                     | 1286                         | 1145              | 0.422 | 479                 | 485                         | 1.3               | 1.7             | 10.584    | B                             |
|                            |       |            | 2    | 1      | 591                   | 148                     | 1286                         | 1145              | 0.516 | 590                 | 584                         | 2.2               | 2.7             | 15.453    | C                             |
|                            |       |            |      | 2      | 113                   | 28                      | 1286                         | 1145              | 0.099 | 110                 | 114                         | 0.5               | 0.6             | 15.162    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 293                   | 73                      | 1286                         | 1146              | 0.256 | 293                 | 289                         | 0.8               | 0.9             | 10.221    | B                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 270                   | 67                      | 1314                         | 716               | 0.377 | 269                 | 266                         | 1.2               | 1.5             | 17.388    | C                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 216                   | 54                      | 1314                         | 716               | 0.301 | 214                 | 216                         | 0.9               | 1.2             | 17.608    | C                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 614                   | 153                     | 1314                         | 717               | 0.856 | 624                 | 614                         | 5.3               | 4.8             | 31.412    | D                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 265                   | 66                      | -                            | -                 | -     | 270                 | 267                         | 0.3               | 0.4             | 7.653     | A                             |
|                            |       |            |      | 2      | 607                   | 152                     | -                            | -                 | -     | 614                 | 612                         | 0.7               | 1.0             | 7.538     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 213                   | 53                      | -                            | -                 | -     | 216                 | 217                         | 0.3               | 0.3             | 6.972     | A                             |
|                            |       |            | 2    | 1      | 47                    | 12                      | 1086                         | 561               | 0.084 | 47                  | 50                          | 0.3               | 0.3             | 20.930    | C                             |
|                            |       |            |      | 2      | 377                   | 94                      | 1086                         | 556               | 0.677 | 378                 | 378                         | 1.6               | 2.2             | 19.099    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 274                   | 69                      | 1086                         | 554               | 0.495 | 279                 | 282                         | 1.3               | 1.3             | 19.226    | C                             |
|                            |       |            |      | 3      | 137                   | 34                      | 1086                         | 555               | 0.247 | 134                 | 131                         | 0.9               | 1.0             | 24.192    | C                             |
|                            |       |            |      | 4      | 39                    | 10                      | 1086                         | 557               | 0.071 | 39                  | 37                          | 0.3               | 0.3             | 23.929    | C                             |

17:30 - 17:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 171                   | 43                      | 850                          | 471               | 0.362 | 171                 | 176                         | 1.0               | 0.5             | 12.063    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 99                    | 25                      | 850                          | 472               | 0.210 | 99                  | 102                         | 0.5               | 0.3             | 12.147    | B                             |
|                            |       |            |      | 3      | 114                   | 29                      | 850                          | 469               | 0.243 | 114                 | 117                         | 0.9               | 0.5             | 16.279    | C                             |
|                            |       |            |      | 4      | 43                    | 11                      | 850                          | 472               | 0.092 | 43                  | 44                          | 0.3               | 0.2             | 16.619    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 269                   | 67                      | -                            | -                 | -     | 270                 | 275                         | 1.1               | 0.0             | 2.626     | A                             |
|                            |       |            |      | 3      | 114                   | 28                      | -                            | -                 | -     | 114                 | 116                         | 0.6               | 0.1             | 3.605     | A                             |
|                            |       |            |      | 4      | 43                    | 11                      | -                            | -                 | -     | 43                  | 44                          | 0.2               | 0.0             | 4.404     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 338                   | 84                      | 1286                         | 1169              | 0.289 | 337                 | 345                         | 1.5               | 0.6             | 7.448     | A                             |
|                            |       |            |      | 4      | 371                   | 93                      | 1286                         | 1169              | 0.318 | 372                 | 380                         | 1.7               | 0.6             | 6.273     | A                             |
|                            |       |            | 2    | 1      | 466                   | 116                     | 1286                         | 1169              | 0.399 | 468                 | 479                         | 2.7               | 0.9             | 9.190     | A                             |
|                            |       |            |      | 2      | 94                    | 23                      | 1286                         | 1170              | 0.080 | 94                  | 93                          | 0.6               | 0.2             | 9.169     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 256                   | 64                      | 1286                         | 1169              | 0.219 | 255                 | 258                         | 0.9               | 0.5             | 6.233     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 221                   | 55                      | 1314                         | 832               | 0.266 | 223                 | 230                         | 1.5               | 0.3             | 10.463    | B                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 179                   | 45                      | 1314                         | 828               | 0.216 | 180                 | 180                         | 1.2               | 0.4             | 10.377    | B                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 496                   | 124                     | 1314                         | 830               | 0.598 | 491                 | 510                         | 4.8               | 2.1             | 14.580    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 221                   | 55                      | -                            | -                 | -     | 221                 | 226                         | 0.4               | 0.0             | 1.409     | A                             |
|                            |       |            |      | 2      | 496                   | 124                     | -                            | -                 | -     | 496                 | 499                         | 1.0               | 0.0             | 1.411     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 178                   | 45                      | -                            | -                 | -     | 179                 | 177                         | 0.3               | 0.0             | 1.273     | A                             |
|                            |       |            | 2    | 1      | 40                    | 10                      | 1086                         | 658               | 0.061 | 41                  | 39                          | 0.3               | 0.1             | 11.356    | B                             |
|                            |       |            |      | 2      | 290                   | 72                      | 1086                         | 661               | 0.438 | 291                 | 304                         | 2.2               | 0.7             | 9.867     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

17:45 - 18:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 139                   | 35                      | 850                          | 530               | 0.262 | 139                 | 137                         | 0.5               | 0.4             | 8.639     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 93                    | 23                      | 850                          | 531               | 0.174 | 93                  | 89                          | 0.3               | 0.2             | 8.672     | A                             |
|                            |       |            |      | 3      | 102                   | 26                      | 850                          | 530               | 0.193 | 102                 | 97                          | 0.5               | 0.3             | 11.301    | B                             |
|                            |       |            |      | 4      | 37                    | 9                       | 850                          | 529               | 0.070 | 37                  | 39                          | 0.2               | 0.1             | 11.185    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 230                   | 58                      | -                            | -                 | -     | 231                 | 225                         | 0.0               | 0.0             | 0.198     | A                             |
|                            |       |            |      | 3      | 102                   | 26                      | -                            | -                 | -     | 102                 | 97                          | 0.1               | 0.0             | 0.644     | A                             |
|                            |       |            |      | 4      | 37                    | 9                       | -                            | -                 | -     | 37                  | 39                          | 0.0               | 0.0             | 0.418     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 288                   | 72                      | 1286                         | 1186              | 0.242 | 286                 | 290                         | 0.6               | 0.4             | 5.565     | A                             |
|                            |       |            |      | 4      | 294                   | 74                      | 1286                         | 1186              | 0.248 | 295                 | 303                         | 0.6               | 0.4             | 4.659     | A                             |
|                            |       |            | 2    | 1      | 396                   | 99                      | 1286                         | 1186              | 0.334 | 394                 | 395                         | 0.9               | 0.9             | 6.514     | A                             |
|                            |       |            |      | 2      | 74                    | 19                      | 1286                         | 1187              | 0.062 | 74                  | 76                          | 0.2               | 0.1             | 6.542     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 226                   | 57                      | 1286                         | 1185              | 0.191 | 227                 | 233                         | 0.5               | 0.2             | 4.403     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 187                   | 47                      | 1314                         | 908               | 0.206 | 186                 | 185                         | 0.3               | 0.4             | 6.768     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 149                   | 37                      | 1314                         | 908               | 0.164 | 148                 | 152                         | 0.4               | 0.3             | 6.974     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 422                   | 105                     | 1314                         | 910               | 0.464 | 419                 | 426                         | 2.1               | 1.0             | 8.142     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 187                   | 47                      | -                            | -                 | -     | 187                 | 185                         | 0.0               | 0.0             | 0.007     | A                             |
|                            |       |            |      | 2      | 422                   | 105                     | -                            | -                 | -     | 422                 | 422                         | 0.0               | 0.0             | 0.006     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 149                   | 37                      | -                            | -                 | -     | 149                 | 152                         | 0.0               | 0.0             | 0.003     | A                             |
|                            |       |            | 2    | 1      | 33                    | 8                       | 1086                         | 725               | 0.046 | 33                  | 33                          | 0.1               | 0.1             | 7.830     | A                             |
|                            |       |            |      | 2      | 243                   | 61                      | 1086                         | 729               | 0.334 | 244                 | 243                         | 0.7               | 0.4             | 6.724     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev, SAT

### Data Errors and Warnings

| Severity | Area            | Item                                     | Description                                                                                                      |
|----------|-----------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry        | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Info     | Lane Simulation | A1 [Lane Simulation]                     | This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.   |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 10.48              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 10.48             | B           |

## 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 |
|----|---------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D9 | 2026 Base + Com Dev + Dev | SAT              | ONE HOUR             | 11:15              | 12:45               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 570                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1445                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 730                     | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 705                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 357                        | 147                | 66                         |
|      | 2 - Hambledon Road (south) | 394             | 27                         | 384                | 640                        |
|      | 3 - Elettra Avenue         | 179             | 402                        | 0                  | 149                        |
|      | 4 - Hambledon Road (north) | 25              | 521                        | 122                | 37                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 4                          | 1                  | 0                          |
|      | 2 - Hambledon Road (south) | 3               | 0                          | 1                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 0                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 4               | 1                          | 0                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 21.42         | 3.7             | C       | 521                     | 781                           |
| 2 - Hambledon Road (south) | 8.01          | 3.6             | A       | 1330                    | 1995                          |
| 3 - Elettra Avenue         | 8.78          | 2.2             | A       | 666                     | 999                           |
| 4 - Hambledon Road (north) | 8.49          | 1.7             | A       | 642                     | 963                           |

## Main Results for each time segment

## 11:15 - 11:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 430                   | 108                     | 861                       | 425                 | 420                         | 472                             | 0.0               | 1.2             | 8.331     | A                             |
| 2 - Hambleton Road (south) | 1125                  | 281                     | 282                       | 1125                | 1093                        | 1004                            | 0.0               | 1.5             | 4.784     | A                             |
| 3 - Elettra Avenue         | 559                   | 140                     | 903                       | 562                 | 551                         | 504                             | 0.0               | 0.6             | 5.131     | A                             |
| 4 - Hambleton Road (north) | 547                   | 137                     | 784                       | 549                 | 536                         | 682                             | 0.0               | 0.7             | 5.349     | A                             |

## 11:30 - 11:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 512                   | 128                     | 990                       | 508                 | 501                         | 531                             | 1.2               | 1.5             | 10.835    | B                             |
| 2 - Hambleton Road (south) | 1305                  | 326                     | 335                       | 1310                | 1308                        | 1163                            | 1.5               | 1.8             | 5.646     | A                             |
| 3 - Elettra Avenue         | 642                   | 160                     | 1040                      | 641                 | 644                         | 604                             | 0.6               | 1.2             | 6.294     | A                             |
| 4 - Hambleton Road (north) | 628                   | 157                     | 894                       | 628                 | 636                         | 787                             | 0.7               | 1.1             | 6.149     | A                             |

## 11:45 - 12:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 615                   | 154                     | 1217                      | 625                 | 618                         | 653                             | 1.5               | 3.2             | 18.279    | C                             |
| 2 - Hambleton Road (south) | 1589                  | 397                     | 404                       | 1598                | 1577                        | 1438                            | 1.8               | 3.6             | 8.008     | A                             |
| 3 - Elettra Avenue         | 806                   | 201                     | 1288                      | 800                 | 803                         | 714                             | 1.2               | 2.2             | 8.311     | A                             |
| 4 - Hambleton Road (north) | 765                   | 191                     | 1101                      | 769                 | 770                         | 987                             | 1.1               | 1.7             | 7.860     | A                             |

## 12:00 - 12:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 623                   | 156                     | 1211                      | 625                 | 619                         | 644                             | 3.2               | 3.7             | 21.418    | C                             |
| 2 - Hambleton Road (south) | 1590                  | 397                     | 394                       | 1583                | 1602                        | 1442                            | 3.6               | 3.6             | 7.665     | A                             |
| 3 - Elettra Avenue         | 793                   | 198                     | 1273                      | 799                 | 797                         | 704                             | 2.2               | 1.3             | 8.781     | A                             |
| 4 - Hambleton Road (north) | 763                   | 191                     | 1093                      | 762                 | 778                         | 980                             | 1.7               | 1.7             | 8.491     | A                             |

## 12:15 - 12:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 503                   | 126                     | 992                       | 503                 | 521                         | 526                             | 3.7               | 1.2             | 11.703    | B                             |
| 2 - Hambleton Road (south) | 1288                  | 322                     | 326                       | 1287                | 1288                        | 1169                            | 3.6               | 1.9             | 5.716     | A                             |
| 3 - Elettra Avenue         | 659                   | 165                     | 1029                      | 657                 | 668                         | 585                             | 1.3               | 1.3             | 6.483     | A                             |
| 4 - Hambleton Road (north) | 630                   | 157                     | 890                       | 628                 | 632                         | 796                             | 1.7               | 1.1             | 6.293     | A                             |

## 12:30 - 12:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 442                   | 111                     | 827                       | 443                 | 435                         | 433                             | 1.2               | 0.9             | 8.774     | A                             |
| 2 - Hambleton Road (south) | 1083                  | 271                     | 283                       | 1087                | 1107                        | 987                             | 1.9               | 1.2             | 4.738     | A                             |
| 3 - Elettra Avenue         | 537                   | 134                     | 880                       | 539                 | 551                         | 491                             | 1.3               | 0.6             | 5.216     | A                             |
| 4 - Hambleton Road (north) | 519                   | 130                     | 741                       | 520                 | 536                         | 679                             | 1.1               | 0.7             | 5.359     | A                             |

## Lane Results

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

### Lanes: Main Results for each time segment

#### 11:15 - 11:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 157                   | 590               | 0.267 | 155                 | 153                         | 0.0               | 0.4             | 7.516     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 272                   | 590               | 0.460 | 270                 | 267                         | 0.0               | 0.7             | 8.452     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 430                   |                   |       | 429                 | 424                         | 0.0               | 0.1             | 0.212     | A                             |
|                            | Exit  | 1          | 1    |                  | 472                   |                   |       | 472                 | 449                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 553                   | 1177              | 0.470 | 553                 | 539                         | 0.0               | 0.8             | 4.810     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 572                   | 1177              | 0.486 | 573                 | 554                         | 0.0               | 0.7             | 4.759     | A                             |
|                            | Exit  | 1          | 1    |                  | 1004                  |                   |       | 1004                | 986                         | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 252                   | 968               | 0.260 | 252                 | 247                         | 0.0               | 0.4             | 4.864     | A                             |
|                            |       |            | 2    | 2, 3             | 308                   | 968               | 0.318 | 310                 | 304                         | 0.0               | 0.2             | 5.348     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 559                   |                   |       | 559                 | 554                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 504                   |                   |       | 504                 | 492                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 249                   | 825               | 0.302 | 248                 | 240                         | 0.0               | 0.3             | 5.021     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 298                   | 825               | 0.361 | 301                 | 296                         | 0.0               | 0.4             | 5.614     | A                             |
|                            | Exit  | 1          | 1    |                  | 682                   |                   |       | 682                 | 674                         | 0.0               | 0.0             | 0.000     | A                             |

#### 11:30 - 11:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 196                   | 551               | 0.356 | 193                 | 193                         | 0.4               | 0.5             | 8.752     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 317                   | 551               | 0.575 | 315                 | 308                         | 0.7               | 0.9             | 10.625    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 512                   |                   |       | 513                 | 502                         | 0.1               | 0.1             | 0.924     | A                             |
|                            | Exit  | 1          | 1    |                  | 531                   |                   |       | 531                 | 538                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 645                   | 1157              | 0.558 | 649                 | 641                         | 0.8               | 0.8             | 5.580     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 660                   | 1157              | 0.570 | 661                 | 668                         | 0.7               | 0.9             | 5.710     | A                             |
|                            | Exit  | 1          | 1    |                  | 1163                  |                   |       | 1163                | 1168                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 282                   | 916               | 0.308 | 282                 | 284                         | 0.4               | 0.4             | 5.730     | A                             |
|                            |       |            | 2    | 2, 3             | 360                   | 916               | 0.393 | 359                 | 360                         | 0.2               | 0.8             | 6.733     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 642                   |                   |       | 642                 | 647                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 604                   |                   |       | 604                 | 587                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 274                   | 788               | 0.347 | 273                 | 279                         | 0.3               | 0.5             | 5.890     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 354                   | 788               | 0.449 | 355                 | 357                         | 0.4               | 0.6             | 6.350     | A                             |
|                            | Exit  | 1          | 1    |                  | 787                   |                   |       | 787                 | 796                         | 0.0               | 0.0             | 0.000     | A                             |

#### 11:45 - 12:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 257                   | 482               | 0.533 | 258                 | 254                         | 0.5               | 0.9             | 11.733    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 362                   | 482               | 0.749 | 367                 | 364                         | 0.9               | 1.3             | 14.849    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 615                   |                   |       | 619                 | 622                         | 0.1               | 1.0             | 4.651     | A                             |
|                            | Exit  | 1          | 1    |                  | 653                   |                   |       | 653                 | 653                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 792                   | 1130              | 0.701 | 796                 | 785                         | 0.8               | 1.8             | 7.785     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 796                   | 1130              | 0.705 | 802                 | 791                         | 0.9               | 1.8             | 8.231     | A                             |
|                            | Exit  | 1          | 1    |                  | 1438                  |                   |       | 1438                | 1434                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 356                   | 821               | 0.434 | 354                 | 357                         | 0.4               | 0.8             | 7.412     | A                             |
|                            |       |            | 2    | 2, 3             | 450                   | 821               | 0.548 | 447                 | 446                         | 0.8               | 1.4             | 9.028     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 806                   |                   |       | 806                 | 807                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 714                   |                   |       | 714                 | 712                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 348                   | 720               | 0.484 | 351                 | 349                         | 0.5               | 0.7             | 7.496     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 417                   | 720               | 0.579 | 418                 | 421                         | 0.6               | 1.0             | 8.159     | A                             |
|                            | Exit  | 1          | 1    |                  | 987                   |                   |       | 987                 | 970                         | 0.0               | 0.0             | 0.000     | A                             |

#### 12:00 - 12:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 256                   | 484               | 0.528 | 256                 | 251                         | 0.9               | 0.8             | 12.810    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 369                   | 484               | 0.762 | 369                 | 368                         | 1.3               | 1.6             | 15.350    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 623                   |                   |       | 625                 | 620                         | 1.0               | 1.4             | 7.092     | A                             |
|                            | Exit  | 1          | 1    |                  | 644                   |                   |       | 644                 | 657                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 791                   | 1134              | 0.698 | 788                 | 794                         | 1.8               | 1.7             | 7.504     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 798                   | 1134              | 0.704 | 796                 | 807                         | 1.8               | 1.9             | 7.826     | A                             |
|                            | Exit  | 1          | 1    |                  | 1442                  |                   |       | 1442                | 1436                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 349                   | 827               | 0.422 | 350                 | 355                         | 0.8               | 0.6             | 7.849     | A                             |
|                            |       |            | 2    | 2, 3             | 444                   | 827               | 0.537 | 449                 | 442                         | 1.4               | 0.8             | 9.529     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 793                   |                   |       | 793                 | 794                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 704                   |                   |       | 704                 | 720                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 346                   | 722               | 0.478 | 347                 | 357                         | 0.7               | 0.6             | 7.943     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 418                   | 722               | 0.578 | 415                 | 421                         | 1.0               | 1.1             | 8.951     | A                             |
|                            | Exit  | 1          | 1    |                  | 980                   |                   |       | 980                 | 984                         | 0.0               | 0.0             | 0.000     | A                             |

12:15 - 12:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 196                   | 550               | 0.357 | 196                 | 206                         | 0.8               | 0.4             | 9.187     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 307                   | 550               | 0.558 | 308                 | 315                         | 1.6               | 0.9             | 11.353    | B                             |
|                            | Exit  | 1          | 1    | (1, 2, 3, 4)     | 503                   |                   |       | 503                 | 516                         | 1.4               | 0.0             | 1.272     | A                             |
|                            |       |            | 1    |                  | 526                   |                   |       | 526                 | 530                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 641                   | 1160              | 0.552 | 641                 | 640                         | 1.7               | 1.1             | 5.652     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 647                   | 1160              | 0.558 | 646                 | 648                         | 1.9               | 0.9             | 5.780     | A                             |
|                            | Exit  | 1          | 1    |                  | 1169                  |                   |       | 1169                | 1185                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 292                   | 920               | 0.317 | 288                 | 299                         | 0.6               | 0.7             | 6.138     | A                             |
|                            |       |            | 2    | 2, 3             | 367                   | 920               | 0.399 | 368                 | 369                         | 0.8               | 0.6             | 6.763     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 659                   |                   |       | 659                 | 667                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 585                   |                   |       | 585                 | 597                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 278                   | 790               | 0.352 | 278                 | 283                         | 0.6               | 0.5             | 5.928     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 351                   | 790               | 0.445 | 350                 | 350                         | 1.1               | 0.6             | 6.586     | A                             |
|                            | Exit  | 1          | 1    |                  | 796                   |                   |       | 796                 | 797                         | 0.0               | 0.0             | 0.000     | A                             |

12:30 - 12:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 166                   | 600               | 0.277 | 167                 | 165                         | 0.4               | 0.3             | 7.327     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 276                   | 600               | 0.459 | 276                 | 270                         | 0.9               | 0.6             | 9.020     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 442                   |                   |       | 442                 | 434                         | 0.0               | 0.0             | 0.389     | A                             |
|                            | Exit  | 1          | 1    |                  | 433                   |                   |       | 433                 | 450                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 531                   | 1177              | 0.451 | 533                 | 540                         | 1.1               | 0.4             | 4.708     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 552                   | 1177              | 0.469 | 554                 | 567                         | 0.9               | 0.8             | 4.768     | A                             |
|                            | Exit  | 1          | 1    |                  | 987                   |                   |       | 987                 | 996                         | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 234                   | 977               | 0.239 | 236                 | 245                         | 0.7               | 0.3             | 5.040     | A                             |
|                            |       |            | 2    | 2, 3             | 303                   | 977               | 0.310 | 303                 | 305                         | 0.6               | 0.4             | 5.357     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 537                   |                   |       | 537                 | 548                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 491                   |                   |       | 491                 | 494                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 222                   | 840               | 0.264 | 222                 | 231                         | 0.5               | 0.3             | 5.106     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 297                   | 840               | 0.354 | 297                 | 304                         | 0.6               | 0.4             | 5.551     | A                             |
|                            | Exit  | 1          | 1    |                  | 679                   |                   |       | 679                 | 688                         | 0.0               | 0.0             | 0.000     | A                             |

## Lane movements: Main Results for each time segment

11:15 - 11:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 157                   | 39                      | 850                          | 591               | 0.266 | 155                 | 153                         | 0.0               | 0.4             | 7.516     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 110                   | 28                      | 850                          | 590               | 0.187 | 110                 | 109                         | 0.0               | 0.3             | 7.211     | A                             |
|                            |       |            |      | 3      | 111                   | 28                      | 850                          | 592               | 0.188 | 110                 | 109                         | 0.0               | 0.4             | 9.464     | A                             |
|                            |       |            |      | 4      | 50                    | 13                      | 850                          | 594               | 0.084 | 50                  | 49                          | 0.0               | 0.1             | 8.878     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 268                   | 67                      | -                            | -                 | -     | 267                 | 265                         | 0.0               | 0.1             | 0.145     | A                             |
|                            |       |            |      | 3      | 112                   | 28                      | -                            | -                 | -     | 111                 | 110                         | 0.0               | 0.0             | 0.375     | A                             |
|                            |       |            |      | 4      | 50                    | 13                      | -                            | -                 | -     | 50                  | 49                          | 0.0               | 0.0             | 0.192     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 301                   | 75                      | 1286                         | 1177              | 0.256 | 301                 | 292                         | 0.0               | 0.5             | 5.431     | A                             |
|                            |       |            |      | 4      | 252                   | 63                      | 1286                         | 1179              | 0.214 | 252                 | 247                         | 0.0               | 0.3             | 4.074     | A                             |
|                            |       | 2          | 1    | 1      | 312                   | 78                      | 1286                         | 1178              | 0.265 | 312                 | 295                         | 0.0               | 0.4             | 5.295     | A                             |
|                            |       |            |      | 2      | 22                    | 5                       | 1286                         | 1181              | 0.018 | 21                  | 22                          | 0.0               | 0.1             | 5.115     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 239                   | 60                      | 1286                         | 1178              | 0.203 | 239                 | 238                         | 0.0               | 0.3             | 4.070     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 142                   | 35                      | 1314                         | 968               | 0.146 | 140                 | 136                         | 0.0               | 0.2             | 4.815     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 110                   | 27                      | 1314                         | 967               | 0.114 | 112                 | 111                         | 0.0               | 0.1             | 4.924     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 308                   | 77                      | 1314                         | 969               | 0.318 | 310                 | 304                         | 0.0               | 0.2             | 5.348     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 142                   | 35                      | -                            | -                 | -     | 142                 | 137                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 308                   | 77                      | -                            | -                 | -     | 308                 | 305                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 110                   | 27                      | -                            | -                 | -     | 110                 | 112                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 20                    | 5                       | 1038                         | 794               | 0.025 | 19                  | 19                          | 0.0               | 0.1             | 5.316     | A                             |
|                            |       |            |      | 2      | 229                   | 57                      | 1086                         | 826               | 0.278 | 229                 | 221                         | 0.0               | 0.3             | 4.996     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 177                   | 44                      | 1086                         | 827               | 0.214 | 179                 | 176                         | 0.0               | 0.2             | 5.013     | A                             |
|                            |       |            |      | 3      | 93                    | 23                      | 1086                         | 828               | 0.113 | 93                  | 91                          | 0.0               | 0.1             | 6.566     | A                             |
|                            |       |            |      | 4      | 27                    | 7                       | 1086                         | 836               | 0.033 | 28                  | 29                          | 0.0               | 0.0             | 6.260     | A                             |

11:30 - 11:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 196                   | 49                      | 850                          | 550               | 0.356 | 193                 | 193                         | 0.4               | 0.5             | 8.752     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 121                   | 30                      | 850                          | 548               | 0.221 | 121                 | 121                         | 0.3               | 0.2             | 8.824     | A                             |
|                            |       |            |      | 3      | 143                   | 36                      | 850                          | 551               | 0.260 | 140                 | 133                         | 0.4               | 0.5             | 11.739    | B                             |
|                            |       |            |      | 4      | 53                    | 13                      | 850                          | 551               | 0.095 | 53                  | 54                          | 0.1               | 0.2             | 11.740    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 317                   | 79                      | -                            | -                 | -     | 317                 | 314                         | 0.1               | 0.1             | 0.698     | A                             |
|                            |       |            |      | 3      | 143                   | 36                      | -                            | -                 | -     | 143                 | 133                         | 0.0               | 0.0             | 1.343     | A                             |
|                            |       |            |      | 4      | 53                    | 13                      | -                            | -                 | -     | 53                  | 54                          | 0.0               | 0.0             | 1.157     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 353                   | 88                      | 1286                         | 1158              | 0.305 | 356                 | 345                         | 0.5               | 0.5             | 6.261     | A                             |
|                            |       |            |      | 4      | 292                   | 73                      | 1286                         | 1156              | 0.253 | 293                 | 296                         | 0.3               | 0.3             | 4.785     | A                             |
|                            |       |            | 2    | 1      | 353                   | 88                      | 1286                         | 1157              | 0.305 | 352                 | 360                         | 0.4               | 0.6             | 6.370     | A                             |
|                            |       |            |      | 2      | 26                    | 6                       | 1286                         | 1157              | 0.022 | 25                  | 24                          | 0.1               | 0.0             | 6.610     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 281                   | 70                      | 1286                         | 1157              | 0.243 | 283                 | 284                         | 0.3               | 0.3             | 4.808     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 157                   | 39                      | 1314                         | 917               | 0.171 | 157                 | 156                         | 0.2               | 0.2             | 5.548     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 125                   | 31                      | 1314                         | 915               | 0.136 | 125                 | 128                         | 0.1               | 0.2             | 5.953     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 360                   | 90                      | 1314                         | 913               | 0.394 | 359                 | 360                         | 0.2               | 0.8             | 6.733     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 157                   | 39                      | -                            | -                 | -     | 157                 | 156                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 360                   | 90                      | -                            | -                 | -     | 360                 | 363                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 125                   | 31                      | -                            | -                 | -     | 125                 | 128                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 23                    | 6                       | 1086                         | 790               | 0.029 | 22                  | 22                          | 0.1               | 0.1             | 7.203     | A                             |
|                            |       |            |      | 2      | 251                   | 63                      | 1086                         | 788               | 0.318 | 251                 | 257                         | 0.3               | 0.4             | 5.778     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 214                   | 53                      | 1086                         | 788               | 0.271 | 213                 | 213                         | 0.2               | 0.4             | 5.628     | A                             |
|                            |       |            |      | 3      | 107                   | 27                      | 1086                         | 787               | 0.135 | 108                 | 110                         | 0.1               | 0.1             | 7.397     | A                             |
|                            |       |            |      | 4      | 34                    | 9                       | 1086                         | 789               | 0.043 | 34                  | 34                          | 0.0               | 0.1             | 7.464     | A                             |

11:45 - 12:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 257                   | 64                      | 850                          | 482               | 0.533 | 258                 | 254                         | 0.5               | 0.9             | 11.733    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 130                   | 32                      | 850                          | 483               | 0.268 | 130                 | 132                         | 0.2               | 0.6             | 12.750    | B                             |
|                            |       |            |      | 3      | 161                   | 40                      | 850                          | 484               | 0.332 | 164                 | 163                         | 0.5               | 0.6             | 16.054    | C                             |
|                            |       |            |      | 4      | 71                    | 18                      | 850                          | 480               | 0.148 | 73                  | 69                          | 0.2               | 0.2             | 15.937    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 385                   | 96                      | -                            | -                 | -     | 386                 | 389                         | 0.1               | 0.6             | 4.099     | A                             |
|                            |       |            |      | 3      | 160                   | 40                      | -                            | -                 | -     | 161                 | 164                         | 0.0               | 0.3             | 5.586     | A                             |
|                            |       |            |      | 4      | 70                    | 18                      | -                            | -                 | -     | 71                  | 69                          | 0.0               | 0.1             | 5.449     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 420                   | 105                     | 1286                         | 1130              | 0.371 | 420                 | 418                         | 0.5               | 1.1             | 8.536     | A                             |
|                            |       |            |      | 4      | 373                   | 93                      | 1286                         | 1130              | 0.330 | 376                 | 367                         | 0.3               | 0.6             | 6.925     | A                             |
|                            |       |            | 2    | 1      | 423                   | 106                     | 1286                         | 1129              | 0.375 | 428                 | 428                         | 0.6               | 1.0             | 9.238     | A                             |
|                            |       |            |      | 2      | 30                    | 7                       | 1286                         | 1129              | 0.026 | 31                  | 30                          | 0.0               | 0.1             | 9.581     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 343                   | 86                      | 1286                         | 1130              | 0.304 | 343                 | 333                         | 0.3               | 0.8             | 6.838     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 198                   | 50                      | 1314                         | 822               | 0.241 | 196                 | 195                         | 0.2               | 0.5             | 7.435     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 158                   | 39                      | 1314                         | 819               | 0.193 | 158                 | 161                         | 0.2               | 0.3             | 7.384     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 450                   | 112                     | 1314                         | 820               | 0.548 | 447                 | 446                         | 0.8               | 1.4             | 9.028     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 198                   | 50                      | -                            | -                 | -     | 198                 | 197                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 450                   | 112                     | -                            | -                 | -     | 450                 | 448                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 158                   | 39                      | -                            | -                 | -     | 158                 | 162                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 29                    | 7                       | 1086                         | 719               | 0.040 | 29                  | 29                          | 0.1               | 0.1             | 8.522     | A                             |
|                            |       |            |      | 2      | 319                   | 80                      | 1086                         | 719               | 0.444 | 321                 | 320                         | 0.4               | 0.6             | 7.407     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 250                   | 62                      | 1086                         | 722               | 0.346 | 251                 | 251                         | 0.4               | 0.5             | 7.194     | A                             |
|                            |       |            |      | 3      | 128                   | 32                      | 1086                         | 719               | 0.178 | 130                 | 130                         | 0.1               | 0.3             | 9.483     | A                             |
|                            |       |            |      | 4      | 38                    | 10                      | 1086                         | 720               | 0.053 | 37                  | 40                          | 0.1               | 0.2             | 9.847     | A                             |

12:00 - 12:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 256                   | 64                      | 850                          | 485               | 0.528 | 256                 | 251                         | 0.9               | 0.8             | 12.810    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 142                   | 36                      | 850                          | 485               | 0.293 | 142                 | 138                         | 0.6               | 0.5             | 13.540    | B                             |
|                            |       |            |      | 3      | 155                   | 39                      | 850                          | 486               | 0.320 | 156                 | 161                         | 0.6               | 0.6             | 16.461    | C                             |
|                            |       |            |      | 4      | 71                    | 18                      | 850                          | 482               | 0.148 | 70                  | 69                          | 0.2               | 0.4             | 16.255    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 396                   | 99                      | -                            | -                 | -     | 398                 | 388                         | 0.6               | 0.8             | 6.511     | A                             |
|                            |       |            |      | 3      | 155                   | 39                      | -                            | -                 | -     | 155                 | 162                         | 0.3               | 0.4             | 8.249     | A                             |
|                            |       |            |      | 4      | 71                    | 18                      | -                            | -                 | -     | 71                  | 70                          | 0.1               | 0.2             | 7.559     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 425                   | 106                     | 1286                         | 1134              | 0.375 | 419                 | 424                         | 1.1               | 1.2             | 8.488     | A                             |
|                            |       |            |      | 4      | 367                   | 92                      | 1286                         | 1133              | 0.323 | 368                 | 370                         | 0.6               | 0.5             | 6.374     | A                             |
|                            |       |            | 2    | 1      | 425                   | 106                     | 1286                         | 1133              | 0.375 | 425                 | 435                         | 1.0               | 1.2             | 8.872     | A                             |
|                            |       |            |      | 2      | 30                    | 8                       | 1286                         | 1131              | 0.027 | 30                  | 31                          | 0.1               | 0.0             | 8.778     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 343                   | 86                      | 1286                         | 1133              | 0.303 | 341                 | 342                         | 0.8               | 0.7             | 6.432     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 188                   | 47                      | 1314                         | 826               | 0.228 | 189                 | 193                         | 0.5               | 0.3             | 7.843     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 161                   | 40                      | 1314                         | 828               | 0.194 | 161                 | 162                         | 0.3               | 0.3             | 7.856     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 444                   | 111                     | 1314                         | 826               | 0.537 | 449                 | 442                         | 1.4               | 0.8             | 9.529     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 188                   | 47                      | -                            | -                 | -     | 188                 | 192                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 444                   | 111                     | -                            | -                 | -     | 444                 | 439                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 161                   | 40                      | -                            | -                 | -     | 161                 | 163                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 29                    | 7                       | 1086                         | 729               | 0.040 | 30                  | 29                          | 0.1               | 0.1             | 9.117     | A                             |
|                            |       |            |      | 2      | 316                   | 79                      | 1086                         | 723               | 0.437 | 318                 | 328                         | 0.6               | 0.5             | 7.841     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 248                   | 62                      | 1086                         | 724               | 0.342 | 248                 | 246                         | 0.5               | 0.5             | 7.860     | A                             |
|                            |       |            |      | 3      | 130                   | 32                      | 1086                         | 724               | 0.179 | 128                 | 135                         | 0.3               | 0.4             | 10.274    | B                             |
|                            |       |            |      | 4      | 40                    | 10                      | 1086                         | 714               | 0.056 | 39                  | 40                          | 0.2               | 0.2             | 11.130    | B                             |

12:15 - 12:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 196                   | 49                      | 850                          | 551               | 0.356 | 196                 | 206                         | 0.8               | 0.4             | 9.187     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 120                   | 30                      | 850                          | 551               | 0.219 | 120                 | 120                         | 0.5               | 0.3             | 9.550     | A                             |
|                            |       |            |      | 3      | 131                   | 33                      | 850                          | 553               | 0.237 | 133                 | 136                         | 0.6               | 0.3             | 12.514    | B                             |
|                            |       |            |      | 4      | 56                    | 14                      | 850                          | 555               | 0.100 | 54                  | 59                          | 0.4               | 0.2             | 12.250    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 316                   | 79                      | -                            | -                 | -     | 317                 | 324                         | 0.8               | 0.0             | 1.064     | A                             |
|                            |       |            |      | 3      | 131                   | 33                      | -                            | -                 | -     | 131                 | 135                         | 0.4               | 0.0             | 1.627     | A                             |
|                            |       |            |      | 4      | 56                    | 14                      | -                            | -                 | -     | 56                  | 58                          | 0.2               | 0.0             | 1.573     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 349                   | 87                      | 1286                         | 1159              | 0.301 | 348                 | 351                         | 1.2               | 0.6             | 6.298     | A                             |
|                            |       |            |      | 4      | 292                   | 73                      | 1286                         | 1162              | 0.252 | 293                 | 289                         | 0.5               | 0.4             | 4.870     | A                             |
|                            |       |            | 2    | 1      | 341                   | 85                      | 1286                         | 1159              | 0.294 | 339                 | 345                         | 1.2               | 0.5             | 6.532     | A                             |
|                            |       |            |      | 2      | 24                    | 6                       | 1267                         | 1144              | 0.021 | 24                  | 24                          | 0.0               | 0.1             | 6.197     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 281                   | 70                      | 1286                         | 1160              | 0.243 | 283                 | 279                         | 0.7               | 0.3             | 4.832     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 161                   | 40                      | 1314                         | 920               | 0.175 | 159                 | 161                         | 0.3               | 0.3             | 6.084     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 131                   | 33                      | 1314                         | 921               | 0.143 | 130                 | 137                         | 0.3               | 0.4             | 6.201     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 367                   | 92                      | 1314                         | 920               | 0.399 | 368                 | 369                         | 0.8               | 0.6             | 6.763     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 161                   | 40                      | -                            | -                 | -     | 161                 | 162                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 367                   | 92                      | -                            | -                 | -     | 367                 | 368                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 131                   | 33                      | -                            | -                 | -     | 131                 | 137                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 27                    | 7                       | 1086                         | 788               | 0.035 | 28                  | 24                          | 0.1               | 0.1             | 6.583     | A                             |
|                            |       |            |      | 2      | 251                   | 63                      | 1086                         | 789               | 0.318 | 251                 | 259                         | 0.5               | 0.4             | 5.870     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 211                   | 53                      | 1086                         | 789               | 0.267 | 211                 | 207                         | 0.5               | 0.3             | 5.934     | A                             |
|                            |       |            |      | 3      | 105                   | 26                      | 1086                         | 787               | 0.134 | 104                 | 109                         | 0.4               | 0.3             | 7.524     | A                             |
|                            |       |            |      | 4      | 35                    | 9                       | 1086                         | 787               | 0.045 | 35                  | 33                          | 0.2               | 0.0             | 7.535     | A                             |

12:30 - 12:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 166                   | 42                      | 850                          | 601               | 0.277 | 167                 | 165                         | 0.4               | 0.3             | 7.327     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 112                   | 28                      | 850                          | 598               | 0.187 | 113                 | 109                         | 0.3               | 0.1             | 7.476     | A                             |
|                            |       |            |      | 3      | 114                   | 28                      | 850                          | 599               | 0.190 | 113                 | 110                         | 0.3               | 0.4             | 10.100    | B                             |
|                            |       |            |      | 4      | 50                    | 12                      | 850                          | 595               | 0.084 | 50                  | 51                          | 0.2               | 0.1             | 9.902     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 278                   | 70                      | -                            | -                 | -     | 278                 | 273                         | 0.0               | 0.0             | 0.297     | A                             |
|                            |       |            |      | 3      | 114                   | 28                      | -                            | -                 | -     | 114                 | 111                         | 0.0               | 0.0             | 0.564     | A                             |
|                            |       |            |      | 4      | 50                    | 12                      | -                            | -                 | -     | 50                  | 51                          | 0.0               | 0.0             | 0.495     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 286                   | 71                      | 1286                         | 1176              | 0.243 | 287                 | 289                         | 0.6               | 0.3             | 5.275     | A                             |
|                            |       |            |      | 4      | 245                   | 61                      | 1286                         | 1176              | 0.209 | 246                 | 251                         | 0.4               | 0.2             | 4.056     | A                             |
|                            |       |            | 2    | 1      | 289                   | 72                      | 1286                         | 1177              | 0.246 | 291                 | 300                         | 0.5               | 0.5             | 5.415     | A                             |
|                            |       |            |      | 2      | 21                    | 5                       | 1267                         | 1159              | 0.018 | 21                  | 23                          | 0.1               | 0.1             | 5.246     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 241                   | 60                      | 1286                         | 1177              | 0.205 | 242                 | 244                         | 0.3               | 0.2             | 3.947     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 124                   | 31                      | 1314                         | 973               | 0.128 | 126                 | 132                         | 0.3               | 0.1             | 5.220     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 110                   | 27                      | 1314                         | 975               | 0.113 | 110                 | 114                         | 0.4               | 0.1             | 4.830     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 303                   | 76                      | 1314                         | 976               | 0.310 | 303                 | 305                         | 0.6               | 0.4             | 5.357     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 124                   | 31                      | -                            | -                 | -     | 124                 | 131                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 303                   | 76                      | -                            | -                 | -     | 303                 | 305                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 110                   | 27                      | -                            | -                 | -     | 110                 | 113                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 16                    | 4                       | 1038                         | 799               | 0.020 | 16                  | 18                          | 0.1               | 0.0             | 5.606     | A                             |
|                            |       |            |      | 2      | 206                   | 51                      | 1086                         | 840               | 0.245 | 206                 | 213                         | 0.4               | 0.3             | 5.064     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 178                   | 44                      | 1086                         | 839               | 0.212 | 177                 | 181                         | 0.3               | 0.3             | 5.007     | A                             |
|                            |       |            |      | 3      | 90                    | 23                      | 1086                         | 837               | 0.108 | 91                  | 94                          | 0.3               | 0.1             | 6.310     | A                             |
|                            |       |            |      | 4      | 29                    | 7                       | 1086                         | 834               | 0.035 | 30                  | 28                          | 0.0               | 0.0             | 6.469     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev Sens, AM

### Data Errors and Warnings

| Severity | Area            | Item                                     | Description                                                                                                      |
|----------|-----------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry        | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Info     | Lane Simulation | A1 [Lane Simulation]                     | This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.   |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 19.75              | C            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 19.75             | C           |

## 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 |
|-----|--------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D10 | 2026 Base + Com Dev + Dev Sens | AM               | ONE HOUR             | 08:00              | 09:30               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 608                     | 100.000            |
| 2 - Hambleton Road (south) |            | ONE HOUR     | ✓            | 1511                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 611                     | 100.000            |
| 4 - Hambleton Road (north) |            | ONE HOUR     | ✓            | 1067                    | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 415                        | 102                | 91                         |
|      | 2 - Hambleton Road (south) | 339             | 43                         | 420                | 709                        |
|      | 3 - Elettra Avenue         | 113             | 303                        | 0                  | 195                        |
|      | 4 - Hambleton Road (north) | 46              | 796                        | 163                | 62                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambleton Road (south) | 10              | 0                          | 1                  | 6                          |
|      | 3 - Elettra Avenue         | 2               | 8                          | 0                  | 3                          |
|      | 4 - Hambleton Road (north) | 3               | 3                          | 3                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 69.30         | 12.9            | F       | 556                     | 834                           |
| 2 - Hambleton Road (south) | 9.73          | 5.0             | A       | 1387                    | 2080                          |
| 3 - Elettra Avenue         | 8.52          | 1.6             | A       | 556                     | 834                           |
| 4 - Hambleton Road (north) | 12.14         | 3.7             | B       | 976                     | 1464                          |

## Main Results for each time segment

## 08:00 - 08:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 461                   | 115                     | 1024                      | 458                 | 452                         | 374                             | 0.0               | 1.5             | 9.968     | A                             |
| 2 - Hambleton Road (south) | 1132                  | 283                     | 319                       | 1128                | 1130                        | 1163                            | 0.0               | 2.0             | 5.245     | A                             |
| 3 - Elettra Avenue         | 462                   | 115                     | 937                       | 459                 | 461                         | 510                             | 0.0               | 0.8             | 5.313     | A                             |
| 4 - Hambleton Road (north) | 803                   | 201                     | 596                       | 802                 | 798                         | 801                             | 0.0               | 1.5             | 5.982     | A                             |

## 08:15 - 08:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 534                   | 134                     | 1215                      | 538                 | 541                         | 457                             | 1.5               | 2.3             | 14.854    | B                             |
| 2 - Hambleton Road (south) | 1367                  | 342                     | 371                       | 1368                | 1355                        | 1381                            | 2.0               | 2.6             | 6.416     | A                             |
| 3 - Elettra Avenue         | 535                   | 134                     | 1126                      | 534                 | 541                         | 614                             | 0.8               | 1.0             | 6.168     | A                             |
| 4 - Hambleton Road (north) | 963                   | 241                     | 711                       | 962                 | 959                         | 950                             | 1.5               | 1.9             | 7.428     | A                             |

## 08:30 - 08:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 667                   | 167                     | 1489                      | 650                 | 635                         | 542                             | 2.3               | 10.2            | 40.558    | E                             |
| 2 - Hambleton Road (south) | 1663                  | 416                     | 456                       | 1656                | 1656                        | 1684                            | 2.6               | 5.0             | 9.416     | A                             |
| 3 - Elettra Avenue         | 660                   | 165                     | 1363                      | 661                 | 663                         | 748                             | 1.0               | 1.6             | 8.191     | A                             |
| 4 - Hambleton Road (north) | 1164                  | 291                     | 865                       | 1166                | 1160                        | 1159                            | 1.9               | 3.7             | 11.231    | B                             |

## 08:45 - 09:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 662                   | 165                     | 1500                      | 666                 | 661                         | 548                             | 10.2              | 12.9            | 69.300    | F                             |
| 2 - Hambleton Road (south) | 1649                  | 412                     | 467                       | 1650                | 1670                        | 1700                            | 5.0               | 4.1             | 9.735     | A                             |
| 3 - Elettra Avenue         | 674                   | 168                     | 1357                      | 675                 | 672                         | 760                             | 1.6               | 1.5             | 8.520     | A                             |
| 4 - Hambleton Road (north) | 1169                  | 292                     | 874                       | 1174                | 1175                        | 1158                            | 3.7               | 3.4             | 12.142    | B                             |

## 09:00 - 09:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 548                   | 137                     | 1221                      | 555                 | 583                         | 446                             | 12.9              | 2.7             | 28.742    | D                             |
| 2 - Hambleton Road (south) | 1356                  | 339                     | 376                       | 1354                | 1368                        | 1400                            | 4.1               | 2.6             | 6.502     | A                             |
| 3 - Elettra Avenue         | 550                   | 137                     | 1112                      | 548                 | 551                         | 617                             | 1.5               | 1.0             | 6.596     | A                             |
| 4 - Hambleton Road (north) | 955                   | 239                     | 714                       | 953                 | 960                         | 946                             | 3.4               | 2.0             | 7.640     | A                             |

## 09:15 - 09:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 463                   | 116                     | 1026                      | 464                 | 454                         | 372                             | 2.7               | 1.3             | 10.529    | B                             |
| 2 - Hambleton Road (south) | 1154                  | 288                     | 312                       | 1152                | 1152                        | 1178                            | 2.6               | 1.7             | 5.235     | A                             |
| 3 - Elettra Avenue         | 457                   | 114                     | 947                       | 458                 | 460                         | 517                             | 1.0               | 0.6             | 5.376     | A                             |
| 4 - Hambleton Road (north) | 801                   | 200                     | 597                       | 801                 | 802                         | 808                             | 2.0               | 1.2             | 5.944     | A                             |

## Lane Results

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

### Lanes: Main Results for each time segment

#### 08:00 - 08:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 189                   | 541               | 0.350 | 189                 | 185                         | 0.0               | 0.5             | 8.722     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 271                   | 541               | 0.501 | 269                 | 267                         | 0.0               | 0.8             | 10.137    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 461                   |                   |       | 460                 | 457                         | 0.0               | 0.1             | 0.401     | A                             |
|                            | Exit  | 1          | 1    |                  | 374                   |                   |       | 374                 | 371                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 574                   | 1163              | 0.493 | 571                 | 576                         | 0.0               | 1.0             | 5.267     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 559                   | 1163              | 0.480 | 557                 | 555                         | 0.0               | 1.0             | 5.222     | A                             |
|                            | Exit  | 1          | 1    |                  | 1163                  |                   |       | 1163                | 1161                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 236                   | 955               | 0.248 | 235                 | 235                         | 0.0               | 0.4             | 5.338     | A                             |
|                            |       |            | 2    | 2, 3             | 225                   | 955               | 0.235 | 224                 | 226                         | 0.0               | 0.4             | 5.286     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 462                   |                   |       | 462                 | 464                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 510                   |                   |       | 510                 | 513                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 369                   | 888               | 0.416 | 369                 | 365                         | 0.0               | 0.6             | 5.525     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 434                   | 888               | 0.489 | 432                 | 433                         | 0.0               | 0.9             | 6.367     | A                             |
|                            | Exit  | 1          | 1    |                  | 801                   |                   |       | 801                 | 795                         | 0.0               | 0.0             | 0.000     | A                             |

#### 08:15 - 08:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 226                   | 483               | 0.469 | 227                 | 227                         | 0.5               | 0.7             | 11.172    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 308                   | 483               | 0.637 | 310                 | 314                         | 0.8               | 1.1             | 13.504    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 534                   |                   |       | 534                 | 542                         | 0.1               | 0.5             | 2.285     | A                             |
|                            | Exit  | 1          | 1    |                  | 457                   |                   |       | 457                 | 451                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 692                   | 1143              | 0.606 | 694                 | 690                         | 1.0               | 1.3             | 6.351     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 675                   | 1143              | 0.591 | 674                 | 665                         | 1.0               | 1.3             | 6.486     | A                             |
|                            | Exit  | 1          | 1    |                  | 1381                  |                   |       | 1381                | 1388                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 276                   | 883               | 0.312 | 273                 | 275                         | 0.4               | 0.6             | 6.034     | A                             |
|                            |       |            | 2    | 2, 3             | 259                   | 883               | 0.294 | 261                 | 267                         | 0.4               | 0.4             | 6.314     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 535                   |                   |       | 535                 | 542                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 614                   |                   |       | 614                 | 614                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 447                   | 849               | 0.526 | 448                 | 444                         | 0.6               | 0.7             | 7.023     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 516                   | 849               | 0.607 | 513                 | 515                         | 0.9               | 1.1             | 7.776     | A                             |
|                            | Exit  | 1          | 1    |                  | 950                   |                   |       | 950                 | 942                         | 0.0               | 0.0             | 0.000     | A                             |

#### 08:30 - 08:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 288                   | 400               | 0.720 | 288                 | 280                         | 0.7               | 1.5             | 17.019    | C                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 361                   | 400               | 0.902 | 362                 | 355                         | 1.1               | 2.3             | 20.800    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 667                   |                   |       | 650                 | 643                         | 0.5               | 6.3             | 21.219    | C                             |
|                            | Exit  | 1          | 1    |                  | 542                   |                   |       | 542                 | 545                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 840                   | 1110              | 0.757 | 837                 | 838                         | 1.3               | 2.5             | 9.556     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 822                   | 1110              | 0.741 | 819                 | 818                         | 1.3               | 2.6             | 9.267     | A                             |
|                            | Exit  | 1          | 1    |                  | 1684                  |                   |       | 1684                | 1668                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 332                   | 792               | 0.419 | 334                 | 338                         | 0.6               | 0.7             | 8.014     | A                             |
|                            |       |            | 2    | 2, 3             | 328                   | 792               | 0.414 | 326                 | 325                         | 0.4               | 0.9             | 8.383     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 660                   |                   |       | 660                 | 665                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 748                   |                   |       | 748                 | 748                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 560                   | 798               | 0.702 | 559                 | 552                         | 0.7               | 1.8             | 10.647    | B                             |
|                            |       |            | 2    | 2, 3, 4          | 604                   | 798               | 0.757 | 607                 | 608                         | 1.1               | 1.9             | 11.762    | B                             |
|                            | Exit  | 1          | 1    |                  | 1159                  |                   |       | 1159                | 1153                        | 0.0               | 0.0             | 0.000     | A                             |

#### 08:45 - 09:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 301                   | 397               | 0.759 | 301                 | 296                         | 1.5               | 1.6             | 19.580    | C                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 364                   | 397               | 0.917 | 365                 | 365                         | 2.3               | 2.4             | 24.222    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 662                   |                   |       | 665                 | 661                         | 6.3               | 9.0             | 47.073    | E                             |
|                            | Exit  | 1          | 1    |                  | 548                   |                   |       | 548                 | 548                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 839                   | 1106              | 0.758 | 840                 | 850                         | 2.5               | 2.0             | 9.784     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 810                   | 1106              | 0.733 | 810                 | 820                         | 2.6               | 2.1             | 9.681     | A                             |
|                            | Exit  | 1          | 1    |                  | 1700                  |                   |       | 1700                | 1703                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 346                   | 794               | 0.435 | 345                 | 344                         | 0.7               | 0.8             | 8.557     | A                             |
|                            |       |            | 2    | 2, 3             | 328                   | 794               | 0.413 | 330                 | 328                         | 0.9               | 0.7             | 8.477     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 674                   |                   |       | 674                 | 672                         | 0.0               | 0.0             | 0.001     | A                             |
|                            | Exit  | 1          | 1    |                  | 760                   |                   |       | 760                 | 759                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 555                   | 795               | 0.699 | 557                 | 558                         | 1.8               | 1.6             | 11.647    | B                             |
|                            |       |            | 2    | 2, 3, 4          | 613                   | 795               | 0.771 | 616                 | 617                         | 1.9               | 1.8             | 12.586    | B                             |
|                            | Exit  | 1          | 1    |                  | 1158                  |                   |       | 1158                | 1169                        | 0.0               | 0.0             | 0.000     | A                             |

09:00 - 09:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 232                   | 481               | 0.481 | 233                 | 250                         | 1.6               | 0.8             | 14.151    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 321                   | 481               | 0.667 | 322                 | 333                         | 2.4               | 1.2             | 16.417    | C                             |
|                            | Exit  | 2          | 1    | (1, 2, 3, 4)     | 548                   |                   |       | 552                 | 576                         | 9.0               | 0.6             | 13.890    | B                             |
|                            |       |            | 1    |                  | 446                   |                   |       | 446                 | 451                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 694                   | 1141              | 0.608 | 692                 | 700                         | 2.0               | 1.4             | 6.448     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 662                   | 1141              | 0.580 | 661                 | 668                         | 2.1               | 1.2             | 6.561     | A                             |
|                            | Exit  | 1          | 1    |                  | 1400                  |                   |       | 1400                | 1429                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 276                   | 888               | 0.310 | 276                 | 277                         | 0.8               | 0.5             | 6.424     | A                             |
|                            |       |            | 2    | 2, 3             | 274                   | 888               | 0.308 | 273                 | 274                         | 0.7               | 0.5             | 6.779     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 550                   |                   |       | 550                 | 549                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 617                   |                   |       | 617                 | 626                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 441                   | 848               | 0.520 | 442                 | 443                         | 1.6               | 0.9             | 7.363     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 513                   | 848               | 0.605 | 512                 | 517                         | 1.8               | 1.1             | 7.875     | A                             |
|                            | Exit  | 1          | 1    |                  | 946                   |                   |       | 946                 | 956                         | 0.0               | 0.0             | 0.000     | A                             |

09:15 - 09:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 189                   | 540               | 0.351 | 188                 | 185                         | 0.8               | 0.5             | 8.815     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 274                   | 540               | 0.508 | 276                 | 269                         | 1.2               | 0.8             | 10.500    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 463                   |                   |       | 464                 | 451                         | 0.6               | 0.0             | 0.752     | A                             |
|                            | Exit  | 1          | 1    |                  | 372                   |                   |       | 372                 | 381                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 587                   | 1166              | 0.504 | 587                 | 584                         | 1.4               | 0.9             | 5.259     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 567                   | 1166              | 0.486 | 566                 | 568                         | 1.2               | 0.9             | 5.210     | A                             |
|                            | Exit  | 1          | 1    |                  | 1178                  |                   |       | 1178                | 1173                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 232                   | 951               | 0.244 | 233                 | 232                         | 0.5               | 0.3             | 5.171     | A                             |
|                            |       |            | 2    | 2, 3             | 225                   | 951               | 0.236 | 225                 | 228                         | 0.5               | 0.4             | 5.595     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 457                   |                   |       | 457                 | 458                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 517                   |                   |       | 517                 | 516                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 364                   | 888               | 0.410 | 365                 | 365                         | 0.9               | 0.4             | 5.644     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 437                   | 888               | 0.492 | 436                 | 437                         | 1.1               | 0.8             | 6.195     | A                             |
|                            | Exit  | 1          | 1    |                  | 808                   |                   |       | 808                 | 799                         | 0.0               | 0.0             | 0.000     | A                             |

## Lane movements: Main Results for each time segment

08:00 - 08:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 189                   | 47                      | 850                          | 540               | 0.350 | 189                 | 185                         | 0.0               | 0.5             | 8.722     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 123                   | 31                      | 850                          | 540               | 0.227 | 123                 | 124                         | 0.0               | 0.3             | 8.954     | A                             |
|                            |       |            |      | 3      | 79                    | 20                      | 850                          | 539               | 0.147 | 79                  | 76                          | 0.0               | 0.3             | 11.298    | B                             |
|                            |       |            |      | 4      | 69                    | 17                      | 850                          | 539               | 0.128 | 68                  | 66                          | 0.0               | 0.3             | 10.919    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 312                   | 78                      | -                            | -                 | -     | 312                 | 312                         | 0.0               | 0.0             | 0.269     | A                             |
|                            |       |            |      | 3      | 79                    | 20                      | -                            | -                 | -     | 79                  | 77                          | 0.0               | 0.0             | 0.619     | A                             |
|                            |       |            |      | 4      | 69                    | 17                      | -                            | -                 | -     | 69                  | 67                          | 0.0               | 0.0             | 0.738     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 311                   | 78                      | 1286                         | 1163              | 0.267 | 309                 | 314                         | 0.0               | 0.6             | 5.843     | A                             |
|                            |       |            |      | 4      | 263                   | 66                      | 1286                         | 1163              | 0.226 | 262                 | 262                         | 0.0               | 0.4             | 4.539     | A                             |
|                            |       | 2          | 1    | 1      | 253                   | 63                      | 1286                         | 1163              | 0.218 | 254                 | 251                         | 0.0               | 0.5             | 6.068     | A                             |
|                            |       |            |      | 2      | 33                    | 8                       | 1286                         | 1163              | 0.028 | 32                  | 33                          | 0.0               | 0.1             | 5.547     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 273                   | 68                      | 1286                         | 1163              | 0.234 | 271                 | 271                         | 0.0               | 0.4             | 4.428     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 86                    | 21                      | 1314                         | 954               | 0.090 | 86                  | 86                          | 0.0               | 0.2             | 5.245     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 151                   | 38                      | 1314                         | 957               | 0.157 | 150                 | 149                         | 0.0               | 0.2             | 5.393     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 225                   | 56                      | 1314                         | 955               | 0.235 | 224                 | 226                         | 0.0               | 0.4             | 5.286     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 86                    | 21                      | -                            | -                 | -     | 86                  | 87                          | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 225                   | 56                      | -                            | -                 | -     | 225                 | 227                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 151                   | 38                      | -                            | -                 | -     | 151                 | 150                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 35                    | 9                       | 1086                         | 887               | 0.039 | 34                  | 34                          | 0.0               | 0.1             | 6.248     | A                             |
|                            |       |            |      | 2      | 334                   | 84                      | 1086                         | 887               | 0.377 | 335                 | 331                         | 0.0               | 0.5             | 5.450     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 261                   | 65                      | 1086                         | 888               | 0.294 | 260                 | 263                         | 0.0               | 0.5             | 5.671     | A                             |
|                            |       |            |      | 3      | 123                   | 31                      | 1086                         | 888               | 0.139 | 123                 | 123                         | 0.0               | 0.3             | 7.484     | A                             |
|                            |       |            |      | 4      | 49                    | 12                      | 1086                         | 888               | 0.056 | 49                  | 47                          | 0.0               | 0.1             | 7.298     | A                             |

08:15 - 08:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 226                   | 57                      | 850                          | 483               | 0.469 | 227                 | 227                         | 0.5               | 0.7             | 11.172    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 140                   | 35                      | 850                          | 484               | 0.290 | 141                 | 140                         | 0.3               | 0.4             | 11.488    | B                             |
|                            |       |            |      | 3      | 88                    | 22                      | 850                          | 482               | 0.184 | 89                  | 92                          | 0.3               | 0.3             | 14.750    | B                             |
|                            |       |            |      | 4      | 79                    | 20                      | 850                          | 482               | 0.165 | 80                  | 81                          | 0.3               | 0.4             | 15.457    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 366                   | 91                      | -                            | -                 | -     | 366                 | 368                         | 0.0               | 0.3             | 1.951     | A                             |
|                            |       |            |      | 3      | 88                    | 22                      | -                            | -                 | -     | 88                  | 93                          | 0.0               | 0.1             | 3.108     | A                             |
|                            |       |            |      | 4      | 80                    | 20                      | -                            | -                 | -     | 79                  | 82                          | 0.0               | 0.1             | 2.803     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 376                   | 94                      | 1286                         | 1142              | 0.329 | 378                 | 378                         | 0.6               | 0.7             | 7.030     | A                             |
|                            |       |            |      | 4      | 316                   | 79                      | 1286                         | 1143              | 0.277 | 316                 | 313                         | 0.4               | 0.5             | 5.492     | A                             |
|                            |       |            | 2    | 1      | 312                   | 78                      | 1286                         | 1143              | 0.273 | 310                 | 305                         | 0.5               | 0.7             | 7.527     | A                             |
|                            |       |            |      | 2      | 37                    | 9                       | 1286                         | 1142              | 0.033 | 37                  | 38                          | 0.1               | 0.1             | 7.178     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 325                   | 81                      | 1286                         | 1142              | 0.285 | 326                 | 321                         | 0.4               | 0.5             | 5.445     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 103                   | 26                      | 1314                         | 887               | 0.117 | 102                 | 103                         | 0.2               | 0.3             | 6.106     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 172                   | 43                      | 1314                         | 884               | 0.195 | 171                 | 171                         | 0.2               | 0.3             | 5.991     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 259                   | 65                      | 1314                         | 884               | 0.294 | 261                 | 267                         | 0.4               | 0.4             | 6.314     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 103                   | 26                      | -                            | -                 | -     | 103                 | 104                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 259                   | 65                      | -                            | -                 | -     | 259                 | 267                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 172                   | 43                      | -                            | -                 | -     | 172                 | 172                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 45                    | 11                      | 1086                         | 850               | 0.053 | 45                  | 43                          | 0.1               | 0.1             | 8.415     | A                             |
|                            |       |            |      | 2      | 402                   | 100                     | 1086                         | 850               | 0.473 | 403                 | 402                         | 0.5               | 0.6             | 6.876     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

08:30 - 08:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 288                   | 72                      | 850                          | 401               | 0.719 | 288                 | 280                         | 0.7               | 1.5             | 17.019    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 151                   | 38                      | 850                          | 399               | 0.378 | 150                 | 150                         | 0.4               | 0.9             | 19.016    | C                             |
|                            |       |            |      | 3      | 111                   | 28                      | 850                          | 401               | 0.276 | 111                 | 107                         | 0.3               | 0.7             | 21.835    | C                             |
|                            |       |            |      | 4      | 100                   | 25                      | 850                          | 403               | 0.248 | 100                 | 99                          | 0.4               | 0.8             | 22.289    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 452                   | 113                     | -                            | -                 | -     | 439                 | 435                         | 0.3               | 4.2             | 20.133    | C                             |
|                            |       |            |      | 3      | 113                   | 28                      | -                            | -                 | -     | 111                 | 108                         | 0.1               | 1.2             | 23.817    | C                             |
|                            |       |            |      | 4      | 102                   | 25                      | -                            | -                 | -     | 100                 | 100                         | 0.1               | 1.0             | 22.947    | C                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 460                   | 115                     | 1286                         | 1111              | 0.414 | 459                 | 464                         | 0.7               | 1.3             | 10.619    | B                             |
|                            |       |            |      | 4      | 380                   | 95                      | 1286                         | 1111              | 0.342 | 378                 | 374                         | 0.5               | 1.1             | 8.171     | A                             |
|                            |       |            | 2    | 1      | 372                   | 93                      | 1286                         | 1111              | 0.335 | 369                 | 370                         | 0.7               | 1.5             | 10.497    | B                             |
|                            |       |            |      | 2      | 47                    | 12                      | 1286                         | 1111              | 0.042 | 47                  | 47                          | 0.1               | 0.1             | 10.181    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 404                   | 101                     | 1286                         | 1110              | 0.364 | 403                 | 401                         | 0.5               | 1.0             | 8.058     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 123                   | 31                      | 1314                         | 792               | 0.155 | 123                 | 125                         | 0.3               | 0.2             | 7.841     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 209                   | 52                      | 1314                         | 794               | 0.264 | 211                 | 213                         | 0.3               | 0.4             | 8.115     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 328                   | 82                      | 1314                         | 793               | 0.414 | 326                 | 325                         | 0.4               | 0.9             | 8.383     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 123                   | 31                      | -                            | -                 | -     | 123                 | 125                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 328                   | 82                      | -                            | -                 | -     | 328                 | 327                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 209                   | 52                      | -                            | -                 | -     | 209                 | 213                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 51                    | 13                      | 1086                         | 798               | 0.064 | 50                  | 49                          | 0.1               | 0.2             | 11.997    | B                             |
|                            |       |            |      | 2      | 509                   | 127                     | 1086                         | 798               | 0.638 | 509                 | 502                         | 0.6               | 1.6             | 10.513    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

08:45 - 09:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 301                   | 75                      | 850                          | 396               | 0.760 | 301                 | 296                         | 1.5               | 1.6             | 19.580    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 150                   | 37                      | 850                          | 397               | 0.377 | 151                 | 153                         | 0.9               | 0.9             | 23.231    | C                             |
|                            |       |            |      | 3      | 112                   | 28                      | 850                          | 398               | 0.282 | 114                 | 112                         | 0.7               | 0.7             | 24.857    | C                             |
|                            |       |            |      | 4      | 102                   | 26                      | 850                          | 398               | 0.257 | 101                 | 100                         | 0.8               | 0.8             | 24.972    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 448                   | 112                     | -                            | -                 | -     | 451                 | 449                         | 4.2               | 6.0             | 46.044    | E                             |
|                            |       |            |      | 3      | 113                   | 28                      | -                            | -                 | -     | 112                 | 112                         | 1.2               | 1.7             | 48.696    | E                             |
|                            |       |            |      | 4      | 101                   | 25                      | -                            | -                 | -     | 102                 | 100                         | 1.0               | 1.3             | 49.715    | E                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 460                   | 115                     | 1286                         | 1106              | 0.416 | 459                 | 466                         | 1.3               | 1.3             | 10.785    | B                             |
|                            |       |            |      | 4      | 379                   | 95                      | 1286                         | 1107              | 0.342 | 381                 | 384                         | 1.1               | 0.7             | 8.508     | A                             |
|                            |       |            | 2    | 1      | 369                   | 92                      | 1286                         | 1106              | 0.334 | 370                 | 372                         | 1.5               | 1.1             | 10.977    | B                             |
|                            |       |            |      | 2      | 46                    | 11                      | 1286                         | 1111              | 0.041 | 46                  | 48                          | 0.1               | 0.1             | 10.886    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 396                   | 99                      | 1286                         | 1106              | 0.358 | 394                 | 400                         | 1.0               | 0.9             | 8.375     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 128                   | 32                      | 1314                         | 795               | 0.161 | 129                 | 125                         | 0.2               | 0.3             | 8.561     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 218                   | 55                      | 1314                         | 794               | 0.275 | 217                 | 219                         | 0.4               | 0.5             | 8.554     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 328                   | 82                      | 1314                         | 795               | 0.412 | 330                 | 328                         | 0.9               | 0.7             | 8.477     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 128                   | 32                      | -                            | -                 | -     | 128                 | 125                         | 0.0               | 0.0             | 0.001     | A                             |
|                            |       |            |      | 2      | 328                   | 82                      | -                            | -                 | -     | 328                 | 327                         | 0.0               | 0.0             | 0.001     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 218                   | 55                      | -                            | -                 | -     | 218                 | 219                         | 0.0               | 0.0             | 0.002     | A                             |
|                            |       |            | 2    | 1      | 51                    | 13                      | 1086                         | 798               | 0.064 | 49                  | 51                          | 0.2               | 0.2             | 13.050    | B                             |
|                            |       |            |      | 2      | 505                   | 126                     | 1086                         | 795               | 0.635 | 508                 | 507                         | 1.6               | 1.3             | 11.507    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 364                   | 91                      | 1086                         | 796               | 0.458 | 364                 | 371                         | 1.0               | 1.0             | 11.284    | B                             |
|                            |       |            |      | 3      | 185                   | 46                      | 1086                         | 795               | 0.233 | 187                 | 180                         | 0.6               | 0.6             | 14.526    | B                             |
|                            |       |            |      | 4      | 64                    | 16                      | 1086                         | 796               | 0.081 | 65                  | 66                          | 0.2               | 0.2             | 14.540    | B                             |

09:00 - 09:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 232                   | 58                      | 850                          | 482               | 0.480 | 233                 | 250                         | 1.6               | 0.8             | 14.151    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 144                   | 36                      | 850                          | 483               | 0.299 | 146                 | 149                         | 0.9               | 0.4             | 14.907    | B                             |
|                            |       |            |      | 3      | 90                    | 23                      | 850                          | 482               | 0.187 | 90                  | 98                          | 0.7               | 0.4             | 17.440    | C                             |
|                            |       |            |      | 4      | 86                    | 22                      | 850                          | 481               | 0.180 | 86                  | 87                          | 0.8               | 0.4             | 17.778    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 371                   | 93                      | -                            | -                 | -     | 376                 | 394                         | 6.0               | 0.3             | 13.500    | B                             |
|                            |       |            |      | 3      | 90                    | 22                      | -                            | -                 | -     | 90                  | 96                          | 1.7               | 0.2             | 15.178    | C                             |
|                            |       |            |      | 4      | 87                    | 22                      | -                            | -                 | -     | 86                  | 85                          | 1.3               | 0.1             | 14.183    | B                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 384                   | 96                      | 1286                         | 1141              | 0.336 | 384                 | 383                         | 1.3               | 0.8             | 7.171     | A                             |
|                            |       |            |      | 4      | 310                   | 78                      | 1286                         | 1142              | 0.272 | 309                 | 316                         | 0.7               | 0.6             | 5.533     | A                             |
|                            |       |            | 2    | 1      | 305                   | 76                      | 1286                         | 1141              | 0.268 | 304                 | 306                         | 1.1               | 0.7             | 7.550     | A                             |
|                            |       |            |      | 2      | 37                    | 9                       | 1286                         | 1142              | 0.032 | 36                  | 39                          | 0.1               | 0.1             | 7.036     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 320                   | 80                      | 1286                         | 1141              | 0.280 | 321                 | 324                         | 0.9               | 0.5             | 5.596     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 102                   | 26                      | 1314                         | 891               | 0.115 | 102                 | 103                         | 0.3               | 0.2             | 6.401     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 173                   | 43                      | 1314                         | 890               | 0.195 | 174                 | 174                         | 0.5               | 0.3             | 6.437     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 274                   | 69                      | 1314                         | 888               | 0.308 | 273                 | 274                         | 0.7               | 0.5             | 6.779     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 102                   | 26                      | -                            | -                 | -     | 102                 | 103                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 274                   | 69                      | -                            | -                 | -     | 274                 | 273                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 173                   | 43                      | -                            | -                 | -     | 173                 | 173                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 41                    | 10                      | 1086                         | 847               | 0.048 | 41                  | 42                          | 0.2               | 0.1             | 8.426     | A                             |
|                            |       |            |      | 2      | 401                   | 100                     | 1086                         | 848               | 0.472 | 401                 | 401                         | 1.3               | 0.8             | 7.252     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 311                   | 78                      | 1086                         | 849               | 0.367 | 312                 | 317                         | 1.0               | 0.6             | 7.032     | A                             |
|                            |       |            |      | 3      | 145                   | 36                      | 1086                         | 848               | 0.170 | 143                 | 145                         | 0.6               | 0.4             | 9.278     | A                             |
|                            |       |            |      | 4      | 57                    | 14                      | 1086                         | 848               | 0.067 | 56                  | 55                          | 0.2               | 0.1             | 8.997     | A                             |

09:15 - 09:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 189                   | 47                      | 850                          | 540               | 0.351 | 188                 | 185                         | 0.8               | 0.5             | 8.815     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 133                   | 33                      | 850                          | 539               | 0.246 | 133                 | 126                         | 0.4               | 0.3             | 9.023     | A                             |
|                            |       |            |      | 3      | 75                    | 19                      | 850                          | 540               | 0.138 | 76                  | 75                          | 0.4               | 0.2             | 11.911    | B                             |
|                            |       |            |      | 4      | 67                    | 17                      | 850                          | 540               | 0.124 | 67                  | 67                          | 0.4               | 0.2             | 11.629    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 322                   | 81                      | -                            | -                 | -     | 322                 | 310                         | 0.3               | 0.0             | 0.588     | A                             |
|                            |       |            |      | 3      | 75                    | 19                      | -                            | -                 | -     | 75                  | 75                          | 0.2               | 0.0             | 1.152     | A                             |
|                            |       |            |      | 4      | 67                    | 17                      | -                            | -                 | -     | 67                  | 67                          | 0.1               | 0.0             | 1.048     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 318                   | 80                      | 1286                         | 1167              | 0.273 | 319                 | 317                         | 0.8               | 0.5             | 5.811     | A                             |
|                            |       |            |      | 4      | 269                   | 67                      | 1286                         | 1167              | 0.231 | 268                 | 267                         | 0.6               | 0.4             | 4.568     | A                             |
|                            |       |            | 2    | 1      | 257                   | 64                      | 1286                         | 1167              | 0.221 | 256                 | 264                         | 0.7               | 0.5             | 5.934     | A                             |
|                            |       |            |      | 2      | 31                    | 8                       | 1286                         | 1168              | 0.027 | 31                  | 32                          | 0.1               | 0.0             | 5.717     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 278                   | 70                      | 1286                         | 1166              | 0.238 | 279                 | 272                         | 0.5               | 0.3             | 4.471     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 84                    | 21                      | 1314                         | 951               | 0.089 | 85                  | 84                          | 0.2               | 0.1             | 5.115     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 148                   | 37                      | 1314                         | 949               | 0.156 | 149                 | 148                         | 0.3               | 0.2             | 5.204     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 225                   | 56                      | 1314                         | 953               | 0.236 | 225                 | 228                         | 0.5               | 0.4             | 5.595     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 84                    | 21                      | -                            | -                 | -     | 84                  | 83                          | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 225                   | 56                      | -                            | -                 | -     | 225                 | 227                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 148                   | 37                      | -                            | -                 | -     | 148                 | 147                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 31                    | 8                       | 1086                         | 884               | 0.035 | 31                  | 33                          | 0.1               | 0.1             | 6.549     | A                             |
|                            |       |            |      | 2      | 333                   | 83                      | 1086                         | 888               | 0.375 | 334                 | 332                         | 0.8               | 0.4             | 5.554     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 267                   | 67                      | 1086                         | 888               | 0.301 | 266                 | 269                         | 0.6               | 0.4             | 5.522     | A                             |
|                            |       |            |      | 3      | 123                   | 31                      | 1086                         | 888               | 0.138 | 123                 | 123                         | 0.4               | 0.3             | 7.345     | A                             |
|                            |       |            |      | 4      | 47                    | 12                      | 1086                         | 885               | 0.053 | 47                  | 45                          | 0.1               | 0.1             | 7.048     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev Sens, PM

## Data Errors and Warnings

| Severity | Area            | Item                                     | Description                                                                                                      |
|----------|-----------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry        | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Info     | Lane Simulation | A1 [Lane Simulation]                     | This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.   |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 18.93              | C            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 18.93             | C           |

## 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 |
|-----|--------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D11 | 2026 Base + Com Dev + Dev Sens | PM               | ONE HOUR             | 16:30              | 18:00               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 476                     | 100.000            |
| 2 - Hambledon Road (south) |            | ONE HOUR     | ✓            | 1689                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 1002                    | 100.000            |
| 4 - Hambledon Road (north) |            | ONE HOUR     | ✓            | 820                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 302                        | 127                | 47                         |
|      | 2 - Hambledon Road (south) | 528             | 102                        | 351                | 708                        |
|      | 3 - Elettra Avenue         | 248             | 527                        | 0                  | 227                        |
|      | 4 - Hambledon Road (north) | 43              | 592                        | 150                | 35                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
| From | 1 - Milton road            | 0               | 4                          | 0                  | 1                          |
|      | 2 - Hambledon Road (south) | 3               | 2                          | 0                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 1                          | 0                  | 1                          |
|      | 4 - Hambledon Road (north) | 2               | 3                          | 1                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 29.73         | 4.8             | D       | 439                     | 658                           |
| 2 - Hambledon Road (south) | 11.55         | 6.4             | B       | 1549                    | 2324                          |
| 3 - Elettra Avenue         | 23.78         | 7.9             | C       | 919                     | 1378                          |
| 4 - Hambledon Road (north) | 21.90         | 5.7             | C       | 749                     | 1123                          |

## Main Results for each time segment

## 16:30 - 16:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 376                   | 94                      | 1055                      | 375                 | 362                         | 612                             | 0.0               | 1.1             | 10.077    | B                             |
| 2 - Hambleton Road (south) | 1280                  | 320                     | 276                       | 1279                | 1267                        | 1154                            | 0.0               | 2.1             | 5.529     | A                             |
| 3 - Elettra Avenue         | 753                   | 188                     | 1076                      | 753                 | 755                         | 479                             | 0.0               | 1.4             | 6.774     | A                             |
| 4 - Hambleton Road (north) | 610                   | 152                     | 1055                      | 611                 | 619                         | 774                             | 0.0               | 1.1             | 6.775     | A                             |

## 16:45 - 17:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 432                   | 108                     | 1252                      | 433                 | 431                         | 738                             | 1.1               | 1.5             | 12.684    | B                             |
| 2 - Hambleton Road (south) | 1519                  | 380                     | 332                       | 1519                | 1516                        | 1353                            | 2.1               | 3.0             | 7.202     | A                             |
| 3 - Elettra Avenue         | 890                   | 222                     | 1288                      | 890                 | 893                         | 562                             | 1.4               | 2.5             | 9.415     | A                             |
| 4 - Hambleton Road (north) | 722                   | 181                     | 1269                      | 720                 | 733                         | 908                             | 1.1               | 1.9             | 9.191     | A                             |

## 17:00 - 17:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 513                   | 128                     | 1558                      | 495                 | 504                         | 882                             | 1.5               | 4.8             | 22.730    | C                             |
| 2 - Hambleton Road (south) | 1844                  | 461                     | 386                       | 1842                | 1848                        | 1667                            | 3.0               | 6.3             | 11.551    | B                             |
| 3 - Elettra Avenue         | 1106                  | 277                     | 1546                      | 1100                | 1089                        | 682                             | 2.5               | 7.9             | 21.642    | C                             |
| 4 - Hambleton Road (north) | 913                   | 228                     | 1536                      | 904                 | 889                         | 1109                            | 1.9               | 5.7             | 18.131    | C                             |

## 17:15 - 17:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 526                   | 132                     | 1534                      | 534                 | 531                         | 896                             | 4.8               | 3.8             | 29.730    | D                             |
| 2 - Hambleton Road (south) | 1842                  | 460                     | 395                       | 1836                | 1849                        | 1674                            | 6.3               | 6.4             | 11.472    | B                             |
| 3 - Elettra Avenue         | 1102                  | 276                     | 1531                      | 1107                | 1103                        | 700                             | 7.9               | 6.4             | 23.784    | C                             |
| 4 - Hambleton Road (north) | 902                   | 226                     | 1530                      | 900                 | 906                         | 1108                            | 5.7               | 5.5             | 21.897    | C                             |

## 17:30 - 17:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 423                   | 106                     | 1254                      | 420                 | 432                         | 730                             | 3.8               | 1.8             | 15.136    | C                             |
| 2 - Hambleton Road (south) | 1529                  | 382                     | 319                       | 1529                | 1531                        | 1355                            | 6.4               | 2.8             | 7.423     | A                             |
| 3 - Elettra Avenue         | 903                   | 226                     | 1283                      | 899                 | 912                         | 565                             | 6.4               | 2.8             | 11.534    | B                             |
| 4 - Hambleton Road (north) | 731                   | 183                     | 1257                      | 727                 | 745                         | 925                             | 5.5               | 2.1             | 10.896    | B                             |

## 17:45 - 18:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 364                   | 91                      | 1045                      | 364                 | 362                         | 620                             | 1.8               | 1.0             | 9.886     | A                             |
| 2 - Hambleton Road (south) | 1283                  | 321                     | 275                       | 1284                | 1276                        | 1134                            | 2.8               | 1.8             | 5.565     | A                             |
| 3 - Elettra Avenue         | 757                   | 189                     | 1069                      | 751                 | 762                         | 490                             | 2.8               | 1.8             | 7.401     | A                             |
| 4 - Hambleton Road (north) | 615                   | 154                     | 1049                      | 616                 | 624                         | 771                             | 2.1               | 1.3             | 7.332     | A                             |

## Lane Results

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

### Lanes: Main Results for each time segment

#### 16:30 - 16:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 150                   | 531               | 0.282 | 149                 | 140                         | 0.0               | 0.4             | 8.553     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 225                   | 531               | 0.424 | 226                 | 223                         | 0.0               | 0.6             | 10.369    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 376                   |                   |       | 375                 | 366                         | 0.0               | 0.1             | 0.394     | A                             |
|                            | Exit  | 1          | 1    |                  | 612                   |                   |       | 612                 | 609                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 577                   | 1180              | 0.489 | 578                 | 575                         | 0.0               | 0.8             | 5.013     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 703                   | 1180              | 0.596 | 702                 | 692                         | 0.0               | 1.3             | 5.964     | A                             |
|                            | Exit  | 1          | 1    |                  | 1154                  |                   |       | 1154                | 1152                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 350                   | 902               | 0.388 | 353                 | 356                         | 0.0               | 0.6             | 6.415     | A                             |
|                            |       |            | 2    | 2, 3             | 403                   | 902               | 0.446 | 400                 | 399                         | 0.0               | 0.9             | 7.095     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 753                   |                   |       | 753                 | 761                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 479                   |                   |       | 479                 | 478                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 266                   | 735               | 0.362 | 268                 | 277                         | 0.0               | 0.4             | 6.480     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 344                   | 735               | 0.468 | 344                 | 342                         | 0.0               | 0.6             | 7.012     | A                             |
|                            | Exit  | 1          | 1    |                  | 774                   |                   |       | 774                 | 765                         | 0.0               | 0.0             | 0.000     | A                             |

#### 16:45 - 17:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 171                   | 472               | 0.363 | 172                 | 170                         | 0.4               | 0.4             | 9.636     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 260                   | 472               | 0.550 | 261                 | 262                         | 0.6               | 0.9             | 12.769    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 432                   |                   |       | 431                 | 433                         | 0.1               | 0.1             | 1.124     | A                             |
|                            | Exit  | 1          | 1    |                  | 738                   |                   |       | 738                 | 739                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 693                   | 1158              | 0.599 | 692                 | 692                         | 0.8               | 1.3             | 6.389     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 825                   | 1158              | 0.713 | 826                 | 823                         | 1.3               | 1.8             | 7.898     | A                             |
|                            | Exit  | 1          | 1    |                  | 1353                  |                   |       | 1353                | 1365                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 420                   | 821               | 0.511 | 420                 | 423                         | 0.6               | 1.2             | 8.608     | A                             |
|                            |       |            | 2    | 2, 3             | 470                   | 821               | 0.573 | 470                 | 469                         | 0.9               | 1.4             | 10.127    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 890                   |                   |       | 890                 | 897                         | 0.0               | 0.0             | 0.011     | A                             |
|                            | Exit  | 1          | 1    |                  | 562                   |                   |       | 562                 | 563                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 330                   | 664               | 0.497 | 328                 | 338                         | 0.4               | 0.8             | 8.654     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 393                   | 664               | 0.592 | 392                 | 395                         | 0.6               | 1.0             | 9.647     | A                             |
|                            | Exit  | 1          | 1    |                  | 908                   |                   |       | 908                 | 906                         | 0.0               | 0.0             | 0.000     | A                             |

#### 17:00 - 17:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 204                   | 380               | 0.538 | 206                 | 208                         | 0.4               | 1.0             | 15.236    | C                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 293                   | 380               | 0.771 | 290                 | 296                         | 0.9               | 1.9             | 18.388    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 513                   |                   |       | 497                 | 510                         | 0.1               | 2.0             | 5.531     | A                             |
|                            | Exit  | 1          | 1    |                  | 882                   |                   |       | 882                 | 885                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 873                   | 1137              | 0.768 | 869                 | 881                         | 1.3               | 2.8             | 10.190    | B                             |
|                            |       |            | 2    | 1, 2, 4          | 971                   | 1137              | 0.854 | 973                 | 967                         | 1.8               | 3.5             | 12.811    | B                             |
|                            | Exit  | 1          | 1    |                  | 1667                  |                   |       | 1667                | 1649                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 514                   | 722               | 0.712 | 513                 | 515                         | 1.2               | 2.9             | 17.773    | C                             |
|                            |       |            | 2    | 2, 3             | 591                   | 722               | 0.819 | 587                 | 574                         | 1.4               | 4.1             | 21.678    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 1106                  |                   |       | 1106                | 1107                        | 0.0               | 0.9             | 1.702     | A                             |
|                            | Exit  | 1          | 1    |                  | 682                   |                   |       | 682                 | 685                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 436                   | 575               | 0.758 | 431                 | 426                         | 0.8               | 2.6             | 17.136    | C                             |
|                            |       |            | 2    | 2, 3, 4          | 477                   | 575               | 0.830 | 473                 | 464                         | 1.0               | 3.1             | 19.034    | C                             |
|                            | Exit  | 1          | 1    |                  | 1109                  |                   |       | 1109                | 1111                        | 0.0               | 0.0             | 0.000     | A                             |

#### 17:15 - 17:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 226                   | 387               | 0.583 | 227                 | 225                         | 1.0               | 1.0             | 16.517    | C                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 308                   | 387               | 0.797 | 307                 | 306                         | 1.9               | 1.8             | 21.007    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 526                   |                   |       | 534                 | 531                         | 2.0               | 1.1             | 10.631    | B                             |
|                            | Exit  | 1          | 1    |                  | 896                   |                   |       | 896                 | 898                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 879                   | 1134              | 0.775 | 878                 | 880                         | 2.8               | 2.6             | 10.085    | B                             |
|                            |       |            | 2    | 1, 2, 4          | 963                   | 1134              | 0.849 | 959                 | 969                         | 3.5               | 3.8             | 12.754    | B                             |
|                            | Exit  | 1          | 1    |                  | 1674                  |                   |       | 1674                | 1680                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 533                   | 728               | 0.732 | 532                 | 526                         | 2.9               | 2.8             | 19.096    | C                             |
|                            |       |            | 2    | 2, 3             | 575                   | 728               | 0.789 | 575                 | 577                         | 4.1               | 3.3             | 24.064    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 1102                  |                   |       | 1107                | 1099                        | 0.9               | 0.3             | 2.164     | A                             |
|                            | Exit  | 1          | 1    |                  | 700                   |                   |       | 700                 | 691                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 433                   | 577               | 0.750 | 432                 | 439                         | 2.6               | 2.5             | 20.650    | C                             |
|                            |       |            | 2    | 2, 3, 4          | 469                   | 577               | 0.814 | 468                 | 467                         | 3.1               | 3.1             | 23.057    | C                             |
|                            | Exit  | 1          | 1    |                  | 1108                  |                   |       | 1108                | 1119                        | 0.0               | 0.0             | 0.000     | A                             |

17:30 - 17:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 168                   | 471               | 0.357 | 167                 | 173                         | 1.0               | 0.6             | 11.797    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 255                   | 471               | 0.540 | 253                 | 259                         | 1.8               | 1.1             | 13.876    | B                             |
|                            | Exit  | 1          | 1    | (1, 2, 3, 4)     | 423                   |                   |       | 423                 | 428                         | 1.1               | 0.2             | 2.188     | A                             |
|                            |       |            | 1    |                  | 730                   |                   |       | 730                 | 740                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 706                   | 1163              | 0.607 | 705                 | 707                         | 2.6               | 1.1             | 6.538     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 823                   | 1163              | 0.708 | 824                 | 824                         | 3.8               | 1.7             | 8.196     | A                             |
|                            | Exit  | 1          | 1    |                  | 1355                  |                   |       | 1355                | 1385                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 430                   | 823               | 0.522 | 428                 | 431                         | 2.8               | 1.2             | 10.732    | B                             |
|                            |       |            | 2    | 2, 3             | 474                   | 823               | 0.576 | 471                 | 481                         | 3.3               | 1.6             | 12.008    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 903                   |                   |       | 903                 | 899                         | 0.3               | 0.0             | 0.195     | A                             |
|                            | Exit  | 1          | 1    |                  | 565                   |                   |       | 565                 | 571                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 336                   | 668               | 0.503 | 336                 | 347                         | 2.5               | 0.8             | 10.345    | B                             |
|                            |       |            | 2    | 2, 3, 4          | 395                   | 668               | 0.591 | 391                 | 399                         | 3.1               | 1.3             | 11.369    | B                             |
|                            | Exit  | 1          | 1    |                  | 925                   |                   |       | 925                 | 924                         | 0.0               | 0.0             | 0.000     | A                             |

17:45 - 18:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 136                   | 534               | 0.255 | 138                 | 138                         | 0.6               | 0.3             | 8.321     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 227                   | 534               | 0.424 | 226                 | 224                         | 1.1               | 0.7             | 10.246    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 364                   |                   |       | 363                 | 359                         | 0.2               | 0.1             | 0.381     | A                             |
|                            | Exit  | 1          | 1    |                  | 620                   |                   |       | 620                 | 625                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 586                   | 1180              | 0.497 | 588                 | 573                         | 1.1               | 0.6             | 5.058     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 697                   | 1180              | 0.591 | 696                 | 703                         | 1.7               | 1.2             | 5.985     | A                             |
|                            | Exit  | 1          | 1    |                  | 1134                  |                   |       | 1134                | 1152                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 365                   | 905               | 0.404 | 363                 | 365                         | 1.2               | 0.9             | 7.072     | A                             |
|                            |       |            | 2    | 2, 3             | 392                   | 905               | 0.433 | 388                 | 398                         | 1.6               | 0.9             | 7.705     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 757                   |                   |       | 757                 | 758                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 490                   |                   |       | 490                 | 475                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 275                   | 737               | 0.374 | 275                 | 281                         | 0.8               | 0.6             | 6.991     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 339                   | 737               | 0.461 | 341                 | 342                         | 1.3               | 0.6             | 7.613     | A                             |
|                            | Exit  | 1          | 1    |                  | 771                   |                   |       | 771                 | 772                         | 0.0               | 0.0             | 0.000     | A                             |

## Lane movements: Main Results for each time segment

16:30 - 16:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 150                   | 37                      | 850                          | 532               | 0.281 | 149                 | 140                         | 0.0               | 0.4             | 8.553     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 93                    | 23                      | 850                          | 530               | 0.175 | 93                  | 90                          | 0.0               | 0.3             | 8.894     | A                             |
|                            |       |            |      | 3      | 98                    | 24                      | 850                          | 530               | 0.185 | 99                  | 97                          | 0.0               | 0.3             | 11.310    | B                             |
|                            |       |            |      | 4      | 35                    | 9                       | 850                          | 532               | 0.066 | 34                  | 35                          | 0.0               | 0.1             | 11.423    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 242                   | 61                      | -                            | -                 | -     | 242                 | 232                         | 0.0               | 0.0             | 0.241     | A                             |
|                            |       |            |      | 3      | 98                    | 25                      | -                            | -                 | -     | 98                  | 98                          | 0.0               | 0.0             | 0.627     | A                             |
|                            |       |            |      | 4      | 35                    | 9                       | -                            | -                 | -     | 35                  | 36                          | 0.0               | 0.0             | 0.710     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 266                   | 66                      | 1286                         | 1180              | 0.225 | 266                 | 268                         | 0.0               | 0.4             | 5.518     | A                             |
|                            |       |            |      | 4      | 311                   | 78                      | 1286                         | 1179              | 0.264 | 311                 | 307                         | 0.0               | 0.4             | 4.568     | A                             |
|                            |       | 2          | 1    | 1      | 397                   | 99                      | 1286                         | 1179              | 0.337 | 396                 | 391                         | 0.0               | 0.8             | 6.673     | A                             |
|                            |       |            |      | 2      | 76                    | 19                      | 1286                         | 1181              | 0.065 | 76                  | 77                          | 0.0               | 0.2             | 6.634     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 229                   | 57                      | 1286                         | 1180              | 0.194 | 230                 | 224                         | 0.0               | 0.3             | 4.517     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 182                   | 45                      | 1314                         | 901               | 0.202 | 184                 | 186                         | 0.0               | 0.3             | 6.405     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 168                   | 42                      | 1314                         | 901               | 0.187 | 169                 | 170                         | 0.0               | 0.3             | 6.426     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 403                   | 101                     | 1314                         | 903               | 0.446 | 400                 | 399                         | 0.0               | 0.9             | 7.095     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 182                   | 45                      | -                            | -                 | -     | 182                 | 187                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 403                   | 101                     | -                            | -                 | -     | 403                 | 403                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 168                   | 42                      | -                            | -                 | -     | 168                 | 171                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 32                    | 8                       | 1086                         | 737               | 0.043 | 32                  | 32                          | 0.0               | 0.0             | 7.381     | A                             |
|                            |       |            |      | 2      | 234                   | 58                      | 1086                         | 733               | 0.319 | 235                 | 245                         | 0.0               | 0.4             | 6.360     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 202                   | 50                      | 1086                         | 736               | 0.274 | 202                 | 201                         | 0.0               | 0.4             | 6.251     | A                             |
|                            |       |            |      | 3      | 114                   | 29                      | 1086                         | 735               | 0.155 | 114                 | 113                         | 0.0               | 0.2             | 8.039     | A                             |
|                            |       |            |      | 4      | 28                    | 7                       | 1086                         | 736               | 0.039 | 29                  | 28                          | 0.0               | 0.0             | 8.222     | A                             |

16:45 - 17:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 171                   | 43                      | 850                          | 471               | 0.363 | 172                 | 170                         | 0.4               | 0.4             | 9.636     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 99                    | 25                      | 850                          | 471               | 0.210 | 98                  | 102                         | 0.3               | 0.3             | 10.523    | B                             |
|                            |       |            |      | 3      | 119                   | 30                      | 850                          | 472               | 0.252 | 120                 | 116                         | 0.3               | 0.4             | 14.161    | B                             |
|                            |       |            |      | 4      | 42                    | 11                      | 850                          | 470               | 0.090 | 43                  | 43                          | 0.1               | 0.2             | 14.088    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 270                   | 68                      | -                            | -                 | -     | 270                 | 272                         | 0.0               | 0.0             | 0.781     | A                             |
|                            |       |            |      | 3      | 119                   | 30                      | -                            | -                 | -     | 119                 | 117                         | 0.0               | 0.1             | 1.726     | A                             |
|                            |       |            |      | 4      | 43                    | 11                      | -                            | -                 | -     | 42                  | 43                          | 0.0               | 0.0             | 1.568     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 307                   | 77                      | 1286                         | 1157              | 0.265 | 306                 | 312                         | 0.4               | 0.6             | 6.972     | A                             |
|                            |       |            |      | 4      | 387                   | 97                      | 1286                         | 1158              | 0.334 | 386                 | 381                         | 0.4               | 0.6             | 5.906     | A                             |
|                            |       |            | 2    | 1      | 484                   | 121                     | 1286                         | 1158              | 0.418 | 485                 | 478                         | 0.8               | 1.2             | 8.864     | A                             |
|                            |       |            |      | 2      | 99                    | 25                      | 1286                         | 1158              | 0.085 | 98                  | 95                          | 0.2               | 0.2             | 8.940     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 243                   | 61                      | 1286                         | 1157              | 0.210 | 244                 | 250                         | 0.3               | 0.3             | 5.687     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 218                   | 54                      | 1314                         | 822               | 0.265 | 217                 | 222                         | 0.3               | 0.6             | 8.633     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 202                   | 51                      | 1314                         | 820               | 0.247 | 203                 | 202                         | 0.3               | 0.5             | 8.581     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 470                   | 118                     | 1314                         | 821               | 0.573 | 470                 | 469                         | 0.9               | 1.4             | 10.127    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 218                   | 54                      | -                            | -                 | -     | 218                 | 223                         | 0.0               | 0.0             | 0.012     | A                             |
|                            |       |            |      | 2      | 470                   | 118                     | -                            | -                 | -     | 470                 | 471                         | 0.0               | 0.0             | 0.011     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 202                   | 51                      | -                            | -                 | -     | 202                 | 203                         | 0.0               | 0.0             | 0.009     | A                             |
|                            |       |            | 2    | 1      | 38                    | 9                       | 1086                         | 666               | 0.056 | 37                  | 39                          | 0.0               | 0.1             | 10.239    | B                             |
|                            |       |            |      | 2      | 292                   | 73                      | 1086                         | 663               | 0.441 | 291                 | 299                         | 0.4               | 0.7             | 8.445     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

17:00 - 17:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 204                   | 51                      | 850                          | 380               | 0.538 | 206                 | 208                         | 0.4               | 1.0             | 15.236    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 112                   | 28                      | 850                          | 381               | 0.294 | 112                 | 113                         | 0.3               | 0.5             | 15.722    | C                             |
|                            |       |            |      | 3      | 132                   | 33                      | 850                          | 381               | 0.345 | 130                 | 135                         | 0.4               | 0.9             | 19.734    | C                             |
|                            |       |            |      | 4      | 49                    | 12                      | 850                          | 380               | 0.128 | 49                  | 48                          | 0.2               | 0.4             | 20.577    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 326                   | 82                      | -                            | -                 | -     | 316                 | 324                         | 0.0               | 1.2             | 4.810     | A                             |
|                            |       |            |      | 3      | 137                   | 34                      | -                            | -                 | -     | 132                 | 137                         | 0.1               | 0.6             | 6.816     | A                             |
|                            |       |            |      | 4      | 50                    | 13                      | -                            | -                 | -     | 49                  | 49                          | 0.0               | 0.2             | 6.538     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 383                   | 96                      | 1286                         | 1138              | 0.336 | 383                 | 388                         | 0.6               | 1.3             | 10.908    | B                             |
|                            |       |            |      | 4      | 490                   | 123                     | 1286                         | 1137              | 0.431 | 486                 | 493                         | 0.6               | 1.6             | 9.620     | A                             |
|                            |       |            | 2    | 1      | 573                   | 143                     | 1286                         | 1138              | 0.504 | 573                 | 571                         | 1.2               | 2.4             | 14.115    | B                             |
|                            |       |            |      | 2      | 109                   | 27                      | 1286                         | 1138              | 0.096 | 110                 | 112                         | 0.2               | 0.4             | 14.044    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 288                   | 72                      | 1286                         | 1138              | 0.253 | 291                 | 284                         | 0.3               | 0.7             | 9.750     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 268                   | 67                      | 1314                         | 721               | 0.371 | 267                 | 268                         | 0.6               | 1.6             | 17.791    | C                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 247                   | 62                      | 1314                         | 722               | 0.342 | 246                 | 246                         | 0.5               | 1.3             | 17.754    | C                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 591                   | 148                     | 1314                         | 722               | 0.819 | 587                 | 574                         | 1.4               | 4.1             | 21.678    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 268                   | 67                      | -                            | -                 | -     | 268                 | 272                         | 0.0               | 0.3             | 1.610     | A                             |
|                            |       |            |      | 2      | 591                   | 148                     | -                            | -                 | -     | 591                 | 585                         | 0.0               | 0.4             | 1.758     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 247                   | 62                      | -                            | -                 | -     | 247                 | 250                         | 0.0               | 0.2             | 1.670     | A                             |
|                            |       |            | 2    | 1      | 44                    | 11                      | 1086                         | 575               | 0.077 | 43                  | 46                          | 0.1               | 0.4             | 19.951    | C                             |
|                            |       |            |      | 2      | 391                   | 98                      | 1086                         | 575               | 0.681 | 388                 | 380                         | 0.7               | 2.3             | 16.791    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 266                   | 67                      | 1086                         | 574               | 0.464 | 265                 | 262                         | 0.5               | 1.6             | 16.912    | C                             |
|                            |       |            |      | 3      | 172                   | 43                      | 1086                         | 577               | 0.299 | 169                 | 162                         | 0.4               | 1.3             | 21.912    | C                             |
|                            |       |            |      | 4      | 38                    | 10                      | 1086                         | 580               | 0.066 | 38                  | 40                          | 0.1               | 0.2             | 20.989    | C                             |

17:15 - 17:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 226                   | 56                      | 850                          | 387               | 0.582 | 227                 | 225                         | 1.0               | 1.0             | 16.517    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 116                   | 29                      | 850                          | 387               | 0.300 | 116                 | 114                         | 0.5               | 0.6             | 18.940    | C                             |
|                            |       |            |      | 3      | 141                   | 35                      | 850                          | 388               | 0.362 | 141                 | 139                         | 0.9               | 0.8             | 21.918    | C                             |
|                            |       |            |      | 4      | 52                    | 13                      | 850                          | 389               | 0.132 | 50                  | 53                          | 0.4               | 0.4             | 22.923    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 335                   | 84                      | -                            | -                 | -     | 342                 | 339                         | 1.2               | 0.5             | 9.794     | A                             |
|                            |       |            |      | 3      | 139                   | 35                      | -                            | -                 | -     | 141                 | 139                         | 0.6               | 0.3             | 11.969    | B                             |
|                            |       |            |      | 4      | 52                    | 13                      | -                            | -                 | -     | 52                  | 53                          | 0.2               | 0.2             | 12.294    | B                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 392                   | 98                      | 1286                         | 1134              | 0.346 | 391                 | 388                         | 1.3               | 1.2             | 11.001    | B                             |
|                            |       |            |      | 4      | 487                   | 122                     | 1286                         | 1134              | 0.430 | 486                 | 492                         | 1.6               | 1.4             | 9.356     | A                             |
|                            |       |            | 2    | 1      | 576                   | 144                     | 1286                         | 1134              | 0.508 | 573                 | 578                         | 2.4               | 2.4             | 14.050    | B                             |
|                            |       |            |      | 2      | 107                   | 27                      | 1286                         | 1133              | 0.095 | 105                 | 109                         | 0.4               | 0.5             | 14.238    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 279                   | 70                      | 1286                         | 1134              | 0.246 | 280                 | 282                         | 0.7               | 0.8             | 9.596     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 278                   | 70                      | 1314                         | 725               | 0.383 | 276                 | 272                         | 1.6               | 1.6             | 19.338    | C                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 254                   | 64                      | 1314                         | 727               | 0.350 | 256                 | 253                         | 1.3               | 1.3             | 18.833    | C                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 575                   | 144                     | 1314                         | 728               | 0.789 | 575                 | 577                         | 4.1               | 3.3             | 24.064    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 278                   | 69                      | -                            | -                 | -     | 278                 | 272                         | 0.3               | 0.1             | 2.060     | A                             |
|                            |       |            |      | 2      | 572                   | 143                     | -                            | -                 | -     | 575                 | 574                         | 0.4               | 0.2             | 2.236     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 253                   | 63                      | -                            | -                 | -     | 254                 | 253                         | 0.2               | 0.1             | 2.114     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 49                    | 12                      | 1086                         | 582               | 0.084 | 47                  | 48                          | 0.4               | 0.4             | 23.348    | C                             |
|                            |       |            |      | 2      | 383                   | 96                      | 1086                         | 577               | 0.665 | 385                 | 390                         | 2.3               | 2.1             | 20.312    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 266                   | 66                      | 1086                         | 578               | 0.460 | 265                 | 265                         | 1.6               | 1.7             | 20.841    | C                             |
|                            |       |            |      | 3      | 167                   | 42                      | 1086                         | 578               | 0.290 | 167                 | 164                         | 1.3               | 1.1             | 25.807    | D                             |
|                            |       |            |      | 4      | 36                    | 9                       | 1086                         | 577               | 0.062 | 36                  | 39                          | 0.2               | 0.2             | 26.262    | D                             |

17:30 - 17:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 168                   | 42                      | 850                          | 471               | 0.358 | 167                 | 173                         | 1.0               | 0.6             | 11.797    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 102                   | 26                      | 850                          | 472               | 0.217 | 101                 | 102                         | 0.6               | 0.5             | 11.792    | B                             |
|                            |       |            |      | 3      | 108                   | 27                      | 850                          | 470               | 0.230 | 108                 | 112                         | 0.8               | 0.5             | 15.349    | C                             |
|                            |       |            |      | 4      | 44                    | 11                      | 850                          | 470               | 0.094 | 44                  | 45                          | 0.4               | 0.2             | 14.814    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 271                   | 68                      | -                            | -                 | -     | 271                 | 273                         | 0.5               | 0.1             | 1.843     | A                             |
|                            |       |            |      | 3      | 109                   | 27                      | -                            | -                 | -     | 108                 | 111                         | 0.3               | 0.1             | 2.819     | A                             |
|                            |       |            |      | 4      | 44                    | 11                      | -                            | -                 | -     | 44                  | 44                          | 0.2               | 0.0             | 2.669     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 322                   | 81                      | 1286                         | 1164              | 0.277 | 322                 | 320                         | 1.2               | 0.5             | 7.238     | A                             |
|                            |       |            |      | 4      | 384                   | 96                      | 1286                         | 1163              | 0.330 | 382                 | 386                         | 1.4               | 0.6             | 5.952     | A                             |
|                            |       |            | 2    | 1      | 472                   | 118                     | 1286                         | 1163              | 0.406 | 475                 | 475                         | 2.4               | 1.1             | 9.253     | A                             |
|                            |       |            |      | 2      | 91                    | 23                      | 1286                         | 1164              | 0.079 | 91                  | 93                          | 0.5               | 0.2             | 8.937     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 259                   | 65                      | 1286                         | 1164              | 0.223 | 258                 | 255                         | 0.8               | 0.4             | 6.007     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 220                   | 55                      | 1314                         | 823               | 0.268 | 220                 | 225                         | 1.6               | 0.6             | 10.816    | B                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 210                   | 52                      | 1314                         | 824               | 0.254 | 208                 | 206                         | 1.3               | 0.6             | 10.639    | B                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 474                   | 118                     | 1314                         | 823               | 0.576 | 471                 | 481                         | 3.3               | 1.6             | 12.008    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 220                   | 55                      | -                            | -                 | -     | 220                 | 222                         | 0.1               | 0.0             | 0.224     | A                             |
|                            |       |            |      | 2      | 474                   | 118                     | -                            | -                 | -     | 474                 | 474                         | 0.2               | 0.0             | 0.183     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 210                   | 52                      | -                            | -                 | -     | 210                 | 203                         | 0.1               | 0.0             | 0.191     | A                             |
|                            |       |            | 2    | 1      | 35                    | 9                       | 1086                         | 664               | 0.053 | 35                  | 39                          | 0.4               | 0.1             | 11.322    | B                             |
|                            |       |            |      | 2      | 301                   | 75                      | 1086                         | 668               | 0.451 | 301                 | 308                         | 2.1               | 0.7             | 10.223    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

17:45 - 18:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 136                   | 34                      | 850                          | 534               | 0.255 | 138                 | 138                         | 0.6               | 0.3             | 8.321     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 93                    | 23                      | 850                          | 532               | 0.175 | 93                  | 92                          | 0.5               | 0.2             | 8.520     | A                             |
|                            |       |            |      | 3      | 97                    | 24                      | 850                          | 534               | 0.182 | 96                  | 95                          | 0.5               | 0.3             | 11.394    | B                             |
|                            |       |            |      | 4      | 37                    | 9                       | 850                          | 534               | 0.068 | 37                  | 37                          | 0.2               | 0.1             | 11.433    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 229                   | 57                      | -                            | -                 | -     | 229                 | 228                         | 0.1               | 0.0             | 0.244     | A                             |
|                            |       |            |      | 3      | 97                    | 24                      | -                            | -                 | -     | 97                  | 94                          | 0.1               | 0.0             | 0.630     | A                             |
|                            |       |            |      | 4      | 37                    | 9                       | -                            | -                 | -     | 37                  | 37                          | 0.0               | 0.0             | 0.560     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 277                   | 69                      | 1286                         | 1180              | 0.234 | 277                 | 263                         | 0.5               | 0.3             | 5.566     | A                             |
|                            |       |            |      | 4      | 309                   | 77                      | 1286                         | 1179              | 0.262 | 311                 | 310                         | 0.6               | 0.3             | 4.623     | A                             |
|                            |       |            | 2    | 1      | 397                   | 99                      | 1286                         | 1179              | 0.337 | 396                 | 399                         | 1.1               | 0.8             | 6.766     | A                             |
|                            |       |            |      | 2      | 76                    | 19                      | 1286                         | 1179              | 0.065 | 77                  | 77                          | 0.2               | 0.1             | 6.416     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 223                   | 56                      | 1286                         | 1179              | 0.189 | 223                 | 227                         | 0.4               | 0.3             | 4.494     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 189                   | 47                      | 1314                         | 906               | 0.208 | 188                 | 193                         | 0.6               | 0.5             | 7.028     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 177                   | 44                      | 1314                         | 905               | 0.195 | 175                 | 172                         | 0.6               | 0.4             | 7.123     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 392                   | 98                      | 1314                         | 905               | 0.433 | 388                 | 398                         | 1.6               | 0.9             | 7.705     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 189                   | 47                      | -                            | -                 | -     | 189                 | 192                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 392                   | 98                      | -                            | -                 | -     | 392                 | 395                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 177                   | 44                      | -                            | -                 | -     | 177                 | 171                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 36                    | 9                       | 1086                         | 734               | 0.049 | 36                  | 34                          | 0.1               | 0.1             | 8.010     | A                             |
|                            |       |            |      | 2      | 239                   | 60                      | 1086                         | 737               | 0.325 | 239                 | 248                         | 0.7               | 0.5             | 6.850     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev Sens, SAT

## Data Errors and Warnings

| Severity | Area            | Item                                     | Description                                                                                                      |
|----------|-----------------|------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry        | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution. |
| Info     | Lane Simulation | A1 [Lane Simulation]                     | This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.   |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 10.57              | B            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 10.57             | B           |

## 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 |
|-----|--------------------------------|------------------|----------------------|--------------------|---------------------|---------------------------|-------------------|
| D12 | 2026 Base + Com Dev + Dev Sens | SAT              | ONE HOUR             | 11:15              | 12:45               | 15                        | ✓                 |

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

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Average Demand (PCU/hr) | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|-------------------------|--------------------|
| 1 - Milton road            |            | ONE HOUR     | ✓            | 570                     | 100.000            |
| 2 - Hambleton Road (south) |            | ONE HOUR     | ✓            | 1415                    | 100.000            |
| 3 - Elettra Avenue         |            | ONE HOUR     | ✓            | 730                     | 100.000            |
| 4 - Hambleton Road (north) |            | ONE HOUR     | ✓            | 735                     | 100.000            |

## Origin-Destination Data

### Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 357                        | 147                | 66                         |
|      | 2 - Hambleton Road (south) | 394             | 27                         | 354                | 640                        |
|      | 3 - Elettra Avenue         | 179             | 372                        | 0                  | 179                        |
|      | 4 - Hambleton Road (north) | 25              | 521                        | 152                | 37                         |

## Vehicle Mix

### Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 4                          | 1                  | 0                          |
|      | 2 - Hambleton Road (south) | 3               | 0                          | 1                  | 1                          |
|      | 3 - Elettra Avenue         | 0               | 0                          | 0                  | 1                          |
|      | 4 - Hambleton Road (north) | 4               | 1                          | 0                  | 0                          |

## Results

### Results Summary for whole modelled period

| Arm                        | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 22.40         | 5.1             | C       | 526                     | 790                           |
| 2 - Hambleton Road (south) | 7.90          | 3.7             | A       | 1299                    | 1949                          |
| 3 - Elettra Avenue         | 8.89          | 1.9             | A       | 672                     | 1008                          |
| 4 - Hambleton Road (north) | 8.18          | 2.0             | A       | 675                     | 1012                          |

## Main Results for each time segment

## 11:15 - 11:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 447                   | 112                     | 849                       | 444                 | 434                         | 458                             | 0.0               | 1.3             | 8.991     | A                             |
| 2 - Hambleton Road (south) | 1083                  | 271                     | 302                       | 1087                | 1066                        | 990                             | 0.0               | 1.3             | 4.742     | A                             |
| 3 - Elettra Avenue         | 562                   | 140                     | 894                       | 561                 | 548                         | 495                             | 0.0               | 0.8             | 5.162     | A                             |
| 4 - Hambleton Road (north) | 556                   | 139                     | 752                       | 555                 | 556                         | 704                             | 0.0               | 0.9             | 5.337     | A                             |

## 11:30 - 11:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 507                   | 127                     | 988                       | 513                 | 515                         | 541                             | 1.3               | 1.4             | 11.240    | B                             |
| 2 - Hambleton Road (south) | 1264                  | 316                     | 367                       | 1263                | 1269                        | 1134                            | 1.3               | 2.1             | 5.694     | A                             |
| 3 - Elettra Avenue         | 635                   | 159                     | 1040                      | 637                 | 648                         | 590                             | 0.8               | 1.0             | 6.008     | A                             |
| 4 - Hambleton Road (north) | 668                   | 167                     | 860                       | 669                 | 658                         | 817                             | 0.9               | 1.1             | 6.135     | A                             |

## 11:45 - 12:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 616                   | 154                     | 1219                      | 627                 | 618                         | 661                             | 1.4               | 3.6             | 20.138    | C                             |
| 2 - Hambleton Road (south) | 1571                  | 393                     | 446                       | 1574                | 1562                        | 1400                            | 2.1               | 3.2             | 7.782     | A                             |
| 3 - Elettra Avenue         | 820                   | 205                     | 1296                      | 821                 | 811                         | 724                             | 1.0               | 1.9             | 8.456     | A                             |
| 4 - Hambleton Road (north) | 792                   | 198                     | 1086                      | 793                 | 802                         | 1031                            | 1.1               | 2.0             | 8.183     | A                             |

## 12:00 - 12:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 642                   | 160                     | 1221                      | 623                 | 626                         | 656                             | 3.6               | 5.1             | 22.396    | C                             |
| 2 - Hambleton Road (south) | 1526                  | 382                     | 444                       | 1523                | 1537                        | 1401                            | 3.2               | 3.7             | 7.896     | A                             |
| 3 - Elettra Avenue         | 811                   | 203                     | 1256                      | 815                 | 803                         | 710                             | 1.9               | 1.8             | 8.887     | A                             |
| 4 - Hambleton Road (north) | 803                   | 201                     | 1074                      | 804                 | 807                         | 998                             | 2.0               | 1.6             | 8.184     | A                             |

## 12:15 - 12:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 517                   | 129                     | 1015                      | 519                 | 532                         | 534                             | 5.1               | 1.5             | 12.981    | B                             |
| 2 - Hambleton Road (south) | 1286                  | 321                     | 371                       | 1284                | 1286                        | 1162                            | 3.7               | 1.9             | 5.792     | A                             |
| 3 - Elettra Avenue         | 658                   | 165                     | 1055                      | 660                 | 661                         | 601                             | 1.8               | 1.0             | 6.418     | A                             |
| 4 - Hambleton Road (north) | 673                   | 168                     | 874                       | 674                 | 661                         | 840                             | 1.6               | 1.3             | 6.362     | A                             |

## 12:30 - 12:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 430                   | 107                     | 833                       | 430                 | 435                         | 456                             | 1.5               | 0.9             | 9.061     | A                             |
| 2 - Hambleton Road (south) | 1066                  | 266                     | 312                       | 1070                | 1070                        | 951                             | 1.9               | 1.3             | 4.793     | A                             |
| 3 - Elettra Avenue         | 545                   | 136                     | 886                       | 543                 | 548                         | 496                             | 1.0               | 0.8             | 5.270     | A                             |
| 4 - Hambleton Road (north) | 557                   | 139                     | 735                       | 554                 | 553                         | 694                             | 1.3               | 0.8             | 5.401     | A                             |

## Lane Results

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

### Lanes: Main Results for each time segment

#### 11:15 - 11:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 169                   | 594               | 0.284 | 168                 | 163                         | 0.0               | 0.4             | 7.625     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 276                   | 594               | 0.465 | 276                 | 272                         | 0.0               | 0.7             | 9.080     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 447                   |                   |       | 445                 | 439                         | 0.0               | 0.1             | 0.444     | A                             |
|                            | Exit  | 1          | 1    |                  | 458                   |                   |       | 458                 | 444                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 526                   | 1170              | 0.450 | 529                 | 519                         | 0.0               | 0.6             | 4.589     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 556                   | 1170              | 0.476 | 557                 | 547                         | 0.0               | 0.7             | 4.889     | A                             |
|                            | Exit  | 1          | 1    |                  | 990                   |                   |       | 990                 | 963                         | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 272                   | 972               | 0.280 | 272                 | 269                         | 0.0               | 0.4             | 5.175     | A                             |
|                            |       |            | 2    | 2, 3             | 290                   | 972               | 0.298 | 290                 | 279                         | 0.0               | 0.4             | 5.150     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 562                   |                   |       | 562                 | 551                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 495                   |                   |       | 495                 | 493                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 242                   | 836               | 0.290 | 243                 | 237                         | 0.0               | 0.3             | 5.018     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 314                   | 836               | 0.375 | 312                 | 319                         | 0.0               | 0.6             | 5.572     | A                             |
|                            | Exit  | 1          | 1    |                  | 704                   |                   |       | 704                 | 704                         | 0.0               | 0.0             | 0.000     | A                             |

#### 11:30 - 11:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 199                   | 552               | 0.360 | 202                 | 202                         | 0.4               | 0.4             | 8.806     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 310                   | 552               | 0.562 | 312                 | 312                         | 0.7               | 1.0             | 11.092    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 507                   |                   |       | 509                 | 515                         | 0.1               | 0.1             | 1.031     | A                             |
|                            | Exit  | 1          | 1    |                  | 541                   |                   |       | 541                 | 534                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 616                   | 1144              | 0.538 | 613                 | 618                         | 0.6               | 1.1             | 5.615     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 648                   | 1144              | 0.566 | 650                 | 651                         | 0.7               | 1.0             | 5.771     | A                             |
|                            | Exit  | 1          | 1    |                  | 1134                  |                   |       | 1134                | 1144                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 318                   | 916               | 0.347 | 318                 | 316                         | 0.4               | 0.5             | 5.942     | A                             |
|                            |       |            | 2    | 2, 3             | 317                   | 916               | 0.347 | 318                 | 332                         | 0.4               | 0.6             | 6.070     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 635                   |                   |       | 635                 | 649                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 590                   |                   |       | 590                 | 587                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 291                   | 800               | 0.364 | 291                 | 287                         | 0.3               | 0.5             | 5.732     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 376                   | 800               | 0.471 | 378                 | 371                         | 0.6               | 0.6             | 6.446     | A                             |
|                            | Exit  | 1          | 1    |                  | 817                   |                   |       | 817                 | 825                         | 0.0               | 0.0             | 0.000     | A                             |

#### 11:45 - 12:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 253                   | 482               | 0.525 | 254                 | 252                         | 0.4               | 0.8             | 12.244    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 371                   | 482               | 0.770 | 373                 | 367                         | 1.0               | 1.6             | 15.303    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 616                   |                   |       | 624                 | 623                         | 0.1               | 1.2             | 6.034     | A                             |
|                            | Exit  | 1          | 1    |                  | 661                   |                   |       | 661                 | 663                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 766                   | 1114              | 0.688 | 768                 | 765                         | 1.1               | 1.5             | 7.549     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 805                   | 1114              | 0.722 | 806                 | 797                         | 1.0               | 1.7             | 8.008     | A                             |
|                            | Exit  | 1          | 1    |                  | 1400                  |                   |       | 1400                | 1396                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 399                   | 818               | 0.487 | 400                 | 399                         | 0.5               | 0.8             | 8.186     | A                             |
|                            |       |            | 2    | 2, 3             | 421                   | 818               | 0.515 | 421                 | 413                         | 0.6               | 1.1             | 8.715     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 820                   |                   |       | 820                 | 815                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 724                   |                   |       | 724                 | 712                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 356                   | 725               | 0.492 | 356                 | 361                         | 0.5               | 0.9             | 7.588     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 435                   | 725               | 0.601 | 437                 | 441                         | 0.6               | 1.2             | 8.665     | A                             |
|                            | Exit  | 1          | 1    |                  | 1031                  |                   |       | 1031                | 1022                        | 0.0               | 0.0             | 0.000     | A                             |

#### 12:00 - 12:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 263                   | 481               | 0.546 | 259                 | 260                         | 0.8               | 1.1             | 12.752    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 367                   | 481               | 0.762 | 364                 | 366                         | 1.6               | 1.8             | 16.365    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 642                   |                   |       | 629                 | 628                         | 1.2               | 2.2             | 7.497     | A                             |
|                            | Exit  | 1          | 1    |                  | 656                   |                   |       | 656                 | 655                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 744                   | 1115              | 0.667 | 743                 | 753                         | 1.5               | 1.8             | 7.691     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 783                   | 1115              | 0.702 | 780                 | 784                         | 1.7               | 1.9             | 8.095     | A                             |
|                            | Exit  | 1          | 1    |                  | 1401                  |                   |       | 1401                | 1399                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 398                   | 833               | 0.478 | 399                 | 391                         | 0.8               | 0.9             | 9.018     | A                             |
|                            |       |            | 2    | 2, 3             | 413                   | 833               | 0.496 | 417                 | 412                         | 1.1               | 0.9             | 8.759     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 811                   |                   |       | 811                 | 803                         | 0.0               | 0.0             | 0.001     | A                             |
|                            | Exit  | 1          | 1    |                  | 710                   |                   |       | 710                 | 715                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 362                   | 729               | 0.497 | 362                 | 362                         | 0.9               | 0.6             | 7.537     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 441                   | 729               | 0.605 | 441                 | 445                         | 1.2               | 1.0             | 8.708     | A                             |
|                            | Exit  | 1          | 1    |                  | 998                   |                   |       | 998                 | 1003                        | 0.0               | 0.0             | 0.000     | A                             |

12:15 - 12:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 195                   | 544               | 0.358 | 198                 | 208                         | 1.1               | 0.3             | 9.911     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 323                   | 544               | 0.594 | 321                 | 324                         | 1.8               | 1.0             | 11.588    | B                             |
|                            | Exit  | 1          | 1    | (1, 2, 3, 4)     | 517                   |                   |       | 518                 | 526                         | 2.2               | 0.1             | 2.163     | A                             |
|                            |       |            | 1    |                  | 534                   |                   |       | 534                 | 539                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 623                   | 1143              | 0.545 | 623                 | 625                         | 1.8               | 0.9             | 5.663     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 663                   | 1143              | 0.580 | 662                 | 661                         | 1.9               | 1.0             | 5.916     | A                             |
|                            | Exit  | 1          | 1    |                  | 1162                  |                   |       | 1162                | 1162                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 322                   | 910               | 0.353 | 322                 | 326                         | 0.9               | 0.6             | 6.364     | A                             |
|                            |       |            | 2    | 2, 3             | 337                   | 910               | 0.370 | 338                 | 335                         | 0.9               | 0.4             | 6.469     | A                             |
|                            |       |            | 2    | (1, 2, 3, 4)     | 658                   |                   |       | 658                 | 658                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 601                   |                   |       | 601                 | 599                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 291                   | 795               | 0.366 | 293                 | 287                         | 0.6               | 0.4             | 5.988     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 382                   | 795               | 0.480 | 381                 | 374                         | 1.0               | 0.8             | 6.648     | A                             |
|                            | Exit  | 1          | 1    |                  | 840                   |                   |       | 840                 | 841                         | 0.0               | 0.0             | 0.000     | A                             |

12:30 - 12:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 161                   | 598               | 0.270 | 161                 | 162                         | 0.3               | 0.3             | 7.604     | A                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 268                   | 598               | 0.448 | 269                 | 272                         | 1.0               | 0.6             | 9.044     | A                             |
|                            |       |            | 2    | (1, 2, 3, 4)     | 430                   |                   |       | 430                 | 433                         | 0.1               | 0.0             | 0.557     | A                             |
|                            | Exit  | 1          | 1    |                  | 456                   |                   |       | 456                 | 452                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 506                   | 1166              | 0.434 | 506                 | 515                         | 0.9               | 0.7             | 4.699     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 560                   | 1166              | 0.480 | 564                 | 556                         | 1.0               | 0.6             | 4.881     | A                             |
|                            | Exit  | 1          | 1    |                  | 951                   |                   |       | 951                 | 959                         | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 268                   | 975               | 0.275 | 268                 | 270                         | 0.6               | 0.4             | 5.387     | A                             |
|                            |       |            | 2    | 2, 3             | 276                   | 975               | 0.283 | 275                 | 278                         | 0.4               | 0.4             | 5.157     | A                             |
|                            |       |            | 2    | (1, 2, 3, 4)     | 545                   |                   |       | 545                 | 547                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 496                   |                   |       | 496                 | 495                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 231                   | 841               | 0.275 | 230                 | 236                         | 0.4               | 0.3             | 4.963     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 325                   | 841               | 0.387 | 324                 | 317                         | 0.8               | 0.5             | 5.725     | A                             |
|                            | Exit  | 1          | 1    |                  | 694                   |                   |       | 694                 | 700                         | 0.0               | 0.0             | 0.000     | A                             |

## Lane movements: Main Results for each time segment

11:15 - 11:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 169                   | 42                      | 850                          | 593               | 0.285 | 168                 | 163                         | 0.0               | 0.4             | 7.625     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 112                   | 28                      | 850                          | 594               | 0.189 | 112                 | 107                         | 0.0               | 0.2             | 7.581     | A                             |
|                            |       |            |      | 3      | 112                   | 28                      | 850                          | 595               | 0.188 | 111                 | 114                         | 0.0               | 0.4             | 10.141    | B                             |
|                            |       |            |      | 4      | 52                    | 13                      | 850                          | 594               | 0.088 | 52                  | 50                          | 0.0               | 0.1             | 9.775     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 282                   | 70                      | -                            | -                 | -     | 281                 | 273                         | 0.0               | 0.1             | 0.314     | A                             |
|                            |       |            |      | 3      | 112                   | 28                      | -                            | -                 | -     | 112                 | 115                         | 0.0               | 0.0             | 0.634     | A                             |
|                            |       |            |      | 4      | 53                    | 13                      | -                            | -                 | -     | 52                  | 51                          | 0.0               | 0.0             | 0.687     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 273                   | 68                      | 1286                         | 1168              | 0.234 | 275                 | 264                         | 0.0               | 0.3             | 5.083     | A                             |
|                            |       |            |      | 4      | 253                   | 63                      | 1286                         | 1169              | 0.217 | 254                 | 255                         | 0.0               | 0.3             | 4.078     | A                             |
|                            |       | 2          | 1    | 1      | 302                   | 75                      | 1286                         | 1169              | 0.258 | 301                 | 292                         | 0.0               | 0.4             | 5.554     | A                             |
|                            |       |            |      | 2      | 21                    | 5                       | 1261                         | 1149              | 0.018 | 21                  | 20                          | 0.0               | 0.0             | 5.449     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 234                   | 58                      | 1286                         | 1169              | 0.200 | 235                 | 235                         | 0.0               | 0.3             | 4.026     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 140                   | 35                      | 1314                         | 972               | 0.144 | 140                 | 134                         | 0.0               | 0.2             | 5.147     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 132                   | 33                      | 1314                         | 974               | 0.135 | 132                 | 135                         | 0.0               | 0.2             | 5.203     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 290                   | 72                      | 1314                         | 973               | 0.298 | 290                 | 279                         | 0.0               | 0.4             | 5.150     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 140                   | 35                      | -                            | -                 | -     | 140                 | 135                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 290                   | 72                      | -                            | -                 | -     | 290                 | 281                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 132                   | 33                      | -                            | -                 | -     | 132                 | 136                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 17                    | 4                       | 1065                         | 824               | 0.021 | 17                  | 18                          | 0.0               | 0.0             | 5.806     | A                             |
|                            |       |            |      | 2      | 225                   | 56                      | 1086                         | 836               | 0.269 | 226                 | 219                         | 0.0               | 0.2             | 4.956     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 175                   | 44                      | 1086                         | 835               | 0.210 | 174                 | 174                         | 0.0               | 0.3             | 4.969     | A                             |
|                            |       |            |      | 3      | 109                   | 27                      | 1086                         | 838               | 0.130 | 108                 | 116                         | 0.0               | 0.3             | 6.330     | A                             |
|                            |       |            |      | 4      | 30                    | 8                       | 1086                         | 844               | 0.036 | 30                  | 29                          | 0.0               | 0.1             | 6.120     | A                             |

11:30 - 11:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 199                   | 50                      | 850                          | 552               | 0.360 | 202                 | 202                         | 0.4               | 0.4             | 8.806     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 119                   | 30                      | 850                          | 551               | 0.216 | 120                 | 122                         | 0.2               | 0.3             | 9.439     | A                             |
|                            |       |            |      | 3      | 131                   | 33                      | 850                          | 551               | 0.238 | 132                 | 129                         | 0.4               | 0.4             | 12.179    | B                             |
|                            |       |            |      | 4      | 60                    | 15                      | 850                          | 552               | 0.109 | 60                  | 61                          | 0.1               | 0.2             | 11.988    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 317                   | 79                      | -                            | -                 | -     | 317                 | 324                         | 0.1               | 0.0             | 0.846     | A                             |
|                            |       |            |      | 3      | 130                   | 33                      | -                            | -                 | -     | 131                 | 130                         | 0.0               | 0.0             | 1.399     | A                             |
|                            |       |            |      | 4      | 60                    | 15                      | -                            | -                 | -     | 60                  | 62                          | 0.0               | 0.0             | 1.206     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 318                   | 79                      | 1286                         | 1144              | 0.278 | 317                 | 318                         | 0.3               | 0.6             | 6.306     | A                             |
|                            |       |            |      | 4      | 298                   | 75                      | 1286                         | 1144              | 0.261 | 297                 | 301                         | 0.3               | 0.5             | 4.884     | A                             |
|                            |       |            | 2    | 1      | 354                   | 89                      | 1286                         | 1145              | 0.309 | 356                 | 353                         | 0.4               | 0.6             | 6.482     | A                             |
|                            |       |            |      | 2      | 24                    | 6                       | 1286                         | 1142              | 0.021 | 24                  | 24                          | 0.0               | 0.0             | 6.560     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 270                   | 68                      | 1286                         | 1145              | 0.236 | 270                 | 274                         | 0.3               | 0.4             | 4.802     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 163                   | 41                      | 1314                         | 915               | 0.179 | 162                 | 160                         | 0.2               | 0.3             | 5.963     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 154                   | 39                      | 1314                         | 913               | 0.169 | 156                 | 156                         | 0.2               | 0.2             | 5.920     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 317                   | 79                      | 1314                         | 915               | 0.347 | 318                 | 332                         | 0.4               | 0.6             | 6.070     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 163                   | 41                      | -                            | -                 | -     | 163                 | 160                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 317                   | 79                      | -                            | -                 | -     | 317                 | 332                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 154                   | 39                      | -                            | -                 | -     | 154                 | 156                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 24                    | 6                       | 1076                         | 789               | 0.030 | 23                  | 22                          | 0.0               | 0.0             | 6.687     | A                             |
|                            |       |            |      | 2      | 267                   | 67                      | 1086                         | 798               | 0.335 | 267                 | 265                         | 0.2               | 0.5             | 5.654     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

11:45 - 12:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 253                   | 63                      | 850                          | 481               | 0.526 | 254                 | 252                         | 0.4               | 0.8             | 12.244    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 139                   | 35                      | 850                          | 484               | 0.287 | 139                 | 136                         | 0.3               | 0.4             | 12.869    | B                             |
|                            |       |            |      | 3      | 158                   | 40                      | 850                          | 483               | 0.328 | 160                 | 158                         | 0.4               | 0.8             | 16.878    | C                             |
|                            |       |            |      | 4      | 74                    | 18                      | 850                          | 484               | 0.153 | 74                  | 73                          | 0.2               | 0.4             | 16.258    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 387                   | 97                      | -                            | -                 | -     | 392                 | 390                         | 0.0               | 0.6             | 5.457     | A                             |
|                            |       |            |      | 3      | 157                   | 39                      | -                            | -                 | -     | 158                 | 160                         | 0.0               | 0.4             | 7.015     | A                             |
|                            |       |            |      | 4      | 73                    | 18                      | -                            | -                 | -     | 74                  | 73                          | 0.0               | 0.2             | 6.864     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 393                   | 98                      | 1286                         | 1115              | 0.352 | 394                 | 387                         | 0.6               | 0.8             | 8.380     | A                             |
|                            |       |            |      | 4      | 374                   | 93                      | 1286                         | 1115              | 0.335 | 374                 | 377                         | 0.5               | 0.7             | 6.695     | A                             |
|                            |       |            | 2    | 1      | 436                   | 109                     | 1286                         | 1115              | 0.391 | 436                 | 433                         | 0.6               | 1.1             | 9.018     | A                             |
|                            |       |            |      | 2      | 30                    | 7                       | 1286                         | 1118              | 0.027 | 30                  | 30                          | 0.0               | 0.1             | 8.819     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 339                   | 85                      | 1286                         | 1115              | 0.304 | 340                 | 334                         | 0.4               | 0.5             | 6.645     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 200                   | 50                      | 1314                         | 820               | 0.244 | 199                 | 201                         | 0.3               | 0.5             | 8.259     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 198                   | 50                      | 1314                         | 821               | 0.242 | 201                 | 197                         | 0.2               | 0.3             | 8.112     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 421                   | 105                     | 1314                         | 817               | 0.516 | 421                 | 413                         | 0.6               | 1.1             | 8.715     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 200                   | 50                      | -                            | -                 | -     | 200                 | 202                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 421                   | 105                     | -                            | -                 | -     | 421                 | 415                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 198                   | 50                      | -                            | -                 | -     | 198                 | 198                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 25                    | 6                       | 1086                         | 732               | 0.035 | 25                  | 29                          | 0.0               | 0.1             | 9.133     | A                             |
|                            |       |            |      | 2      | 331                   | 83                      | 1086                         | 726               | 0.456 | 331                 | 332                         | 0.5               | 0.8             | 7.460     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 224                   | 56                      | 1086                         | 725               | 0.310 | 225                 | 234                         | 0.3               | 0.5             | 7.469     | A                             |
|                            |       |            |      | 3      | 168                   | 42                      | 1086                         | 726               | 0.232 | 170                 | 167                         | 0.2               | 0.5             | 9.936     | A                             |
|                            |       |            |      | 4      | 43                    | 11                      | 1086                         | 730               | 0.058 | 42                  | 40                          | 0.0               | 0.2             | 10.266    | B                             |

12:00 - 12:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 263                   | 66                      | 850                          | 481               | 0.547 | 259                 | 260                         | 0.8               | 1.1             | 12.752    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 132                   | 33                      | 850                          | 482               | 0.274 | 131                 | 130                         | 0.4               | 0.6             | 13.577    | B                             |
|                            |       |            |      | 3      | 161                   | 40                      | 850                          | 481               | 0.334 | 160                 | 161                         | 0.8               | 0.8             | 17.856    | C                             |
|                            |       |            |      | 4      | 74                    | 18                      | 850                          | 479               | 0.154 | 73                  | 75                          | 0.4               | 0.4             | 17.790    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 403                   | 101                     | -                            | -                 | -     | 395                 | 391                         | 0.6               | 1.2             | 6.617     | A                             |
|                            |       |            |      | 3      | 164                   | 41                      | -                            | -                 | -     | 161                 | 162                         | 0.4               | 0.7             | 8.769     | A                             |
|                            |       |            |      | 4      | 75                    | 19                      | -                            | -                 | -     | 74                  | 75                          | 0.2               | 0.3             | 9.179     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 378                   | 94                      | 1286                         | 1114              | 0.339 | 378                 | 384                         | 0.8               | 1.0             | 8.476     | A                             |
|                            |       |            |      | 4      | 366                   | 91                      | 1286                         | 1114              | 0.328 | 365                 | 369                         | 0.7               | 0.8             | 6.877     | A                             |
|                            |       |            | 2    | 1      | 430                   | 108                     | 1286                         | 1115              | 0.386 | 427                 | 432                         | 1.1               | 1.2             | 9.134     | A                             |
|                            |       |            |      | 2      | 29                    | 7                       | 1286                         | 1113              | 0.026 | 29                  | 29                          | 0.1               | 0.1             | 9.138     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 323                   | 81                      | 1286                         | 1115              | 0.290 | 324                 | 323                         | 0.5               | 0.6             | 6.643     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 200                   | 50                      | 1314                         | 834               | 0.240 | 201                 | 196                         | 0.5               | 0.5             | 8.986     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 198                   | 49                      | 1314                         | 833               | 0.237 | 197                 | 195                         | 0.3               | 0.5             | 9.050     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 413                   | 103                     | 1314                         | 832               | 0.497 | 417                 | 412                         | 1.1               | 0.9             | 8.759     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 200                   | 50                      | -                            | -                 | -     | 200                 | 196                         | 0.0               | 0.0             | 0.003     | A                             |
|                            |       |            |      | 2      | 413                   | 103                     | -                            | -                 | -     | 413                 | 411                         | 0.0               | 0.0             | 0.001     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 198                   | 49                      | -                            | -                 | -     | 198                 | 196                         | 0.0               | 0.0             | 0.001     | A                             |
|                            |       |            | 2    | 1      | 27                    | 7                       | 1086                         | 727               | 0.037 | 27                  | 28                          | 0.1               | 0.0             | 8.802     | A                             |
|                            |       |            |      | 2      | 335                   | 84                      | 1086                         | 729               | 0.460 | 335                 | 335                         | 0.8               | 0.6             | 7.436     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 228                   | 57                      | 1086                         | 730               | 0.313 | 231                 | 233                         | 0.5               | 0.4             | 7.535     | A                             |
|                            |       |            |      | 3      | 173                   | 43                      | 1086                         | 727               | 0.238 | 172                 | 170                         | 0.5               | 0.5             | 9.976     | A                             |
|                            |       |            |      | 4      | 39                    | 10                      | 1086                         | 730               | 0.054 | 39                  | 41                          | 0.2               | 0.1             | 10.041    | B                             |

12:15 - 12:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 195                   | 49                      | 850                          | 544               | 0.358 | 198                 | 208                         | 1.1               | 0.3             | 9.911     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 124                   | 31                      | 850                          | 545               | 0.227 | 123                 | 123                         | 0.6               | 0.3             | 9.662     | A                             |
|                            |       |            |      | 3      | 137                   | 34                      | 850                          | 545               | 0.251 | 136                 | 139                         | 0.8               | 0.5             | 12.851    | B                             |
|                            |       |            |      | 4      | 62                    | 15                      | 850                          | 548               | 0.113 | 62                  | 62                          | 0.4               | 0.2             | 12.475    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 317                   | 79                      | -                            | -                 | -     | 318                 | 327                         | 1.2               | 0.1             | 1.874     | A                             |
|                            |       |            |      | 3      | 137                   | 34                      | -                            | -                 | -     | 137                 | 138                         | 0.7               | 0.0             | 2.532     | A                             |
|                            |       |            |      | 4      | 62                    | 16                      | -                            | -                 | -     | 62                  | 61                          | 0.3               | 0.0             | 2.834     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 326                   | 82                      | 1286                         | 1143              | 0.286 | 327                 | 323                         | 1.0               | 0.5             | 6.244     | A                             |
|                            |       |            |      | 4      | 297                   | 74                      | 1286                         | 1142              | 0.260 | 296                 | 302                         | 0.8               | 0.4             | 5.041     | A                             |
|                            |       |            | 2    | 1      | 350                   | 87                      | 1286                         | 1142              | 0.306 | 348                 | 356                         | 1.2               | 0.6             | 6.740     | A                             |
|                            |       |            |      | 2      | 25                    | 6                       | 1286                         | 1143              | 0.022 | 25                  | 25                          | 0.1               | 0.0             | 6.136     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 289                   | 72                      | 1286                         | 1142              | 0.253 | 289                 | 281                         | 0.6               | 0.4             | 4.875     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 164                   | 41                      | 1314                         | 909               | 0.181 | 164                 | 161                         | 0.5               | 0.3             | 6.353     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 158                   | 39                      | 1314                         | 909               | 0.173 | 158                 | 165                         | 0.5               | 0.3             | 6.376     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 337                   | 84                      | 1314                         | 910               | 0.370 | 338                 | 335                         | 0.9               | 0.4             | 6.469     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 164                   | 41                      | -                            | -                 | -     | 164                 | 160                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 337                   | 84                      | -                            | -                 | -     | 337                 | 333                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 158                   | 39                      | -                            | -                 | -     | 158                 | 164                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 22                    | 6                       | 1086                         | 795               | 0.028 | 22                  | 22                          | 0.0               | 0.1             | 7.450     | A                             |
|                            |       |            |      | 2      | 269                   | 67                      | 1086                         | 794               | 0.339 | 271                 | 265                         | 0.6               | 0.4             | 5.869     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 208                   | 52                      | 1086                         | 796               | 0.261 | 207                 | 206                         | 0.4               | 0.4             | 5.870     | A                             |
|                            |       |            |      | 3      | 138                   | 35                      | 1086                         | 795               | 0.174 | 138                 | 136                         | 0.5               | 0.3             | 7.648     | A                             |
|                            |       |            |      | 4      | 35                    | 9                       | 1086                         | 795               | 0.045 | 35                  | 32                          | 0.1               | 0.1             | 7.378     | A                             |

12:30 - 12:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 161                   | 40                      | 850                          | 599               | 0.270 | 161                 | 162                         | 0.3               | 0.3             | 7.604     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 107                   | 27                      | 850                          | 600               | 0.179 | 107                 | 107                         | 0.3               | 0.3             | 7.440     | A                             |
|                            |       |            |      | 3      | 112                   | 28                      | 850                          | 600               | 0.186 | 112                 | 114                         | 0.5               | 0.3             | 10.148    | B                             |
|                            |       |            |      | 4      | 49                    | 12                      | 850                          | 599               | 0.082 | 50                  | 51                          | 0.2               | 0.0             | 9.891     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 269                   | 67                      | -                            | -                 | -     | 269                 | 269                         | 0.1               | 0.0             | 0.393     | A                             |
|                            |       |            |      | 3      | 112                   | 28                      | -                            | -                 | -     | 112                 | 113                         | 0.0               | 0.0             | 0.793     | A                             |
|                            |       |            |      | 4      | 49                    | 12                      | -                            | -                 | -     | 49                  | 50                          | 0.0               | 0.0             | 0.874     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 262                   | 65                      | 1286                         | 1166              | 0.224 | 262                 | 265                         | 0.5               | 0.4             | 5.316     | A                             |
|                            |       |            |      | 4      | 244                   | 61                      | 1286                         | 1166              | 0.210 | 244                 | 250                         | 0.4               | 0.2             | 4.049     | A                             |
|                            |       |            | 2    | 1      | 304                   | 76                      | 1286                         | 1166              | 0.261 | 307                 | 299                         | 0.6               | 0.4             | 5.435     | A                             |
|                            |       |            |      | 2      | 21                    | 5                       | 1286                         | 1168              | 0.018 | 21                  | 21                          | 0.0               | 0.0             | 5.190     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 235                   | 59                      | 1286                         | 1166              | 0.201 | 236                 | 236                         | 0.4               | 0.2             | 4.168     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 132                   | 33                      | 1314                         | 974               | 0.136 | 132                 | 134                         | 0.3               | 0.2             | 5.429     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 136                   | 34                      | 1314                         | 976               | 0.139 | 136                 | 136                         | 0.3               | 0.2             | 5.346     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 276                   | 69                      | 1314                         | 975               | 0.283 | 275                 | 278                         | 0.4               | 0.4             | 5.157     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 132                   | 33                      | -                            | -                 | -     | 132                 | 134                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 276                   | 69                      | -                            | -                 | -     | 276                 | 278                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 136                   | 34                      | -                            | -                 | -     | 136                 | 135                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 17                    | 4                       | 1086                         | 840               | 0.021 | 17                  | 19                          | 0.1               | 0.0             | 5.631     | A                             |
|                            |       |            |      | 2      | 214                   | 53                      | 1086                         | 842               | 0.254 | 213                 | 217                         | 0.4               | 0.3             | 4.908     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

# (Default Analysis Set) - 2026 Base + Com Dev + Dev, AM DIRECT

### Data Errors and Warnings

| Severity | Area            | Item                                     | Description                                                                                                                                                                                  |
|----------|-----------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry        | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                             |
| Warning  | Vehicle Mix     |                                          | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |
| Info     | Lane Simulation | A1 [Lane Simulation]                     | This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.                                                                               |

## Junction Network

### Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 18.40              | C            |

### Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 18.40             | C           |

## Traffic Demand

### Demand Set Details

| ID  | Scenario name             | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|---------------------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D13 | 2026 Base + Com Dev + Dev | AM DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) | O-D data varies over time |
|------------------------------|-------------------------------|--------------------|---------------------------|---------------------------|
| ✓                            | ✓                             | HV Percentages     | 2.00                      | ✓                         |

### Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|--------------------|
| 1 - Milton road            |            | DIRECT       | ✓            | 100.000            |
| 2 - Hambledon Road (south) |            | DIRECT       | ✓            | 100.000            |
| 3 - Elettra Avenue         |            | DIRECT       | ✓            | 100.000            |
| 4 - Hambledon Road (north) |            | DIRECT       | ✓            | 100.000            |

## Origin-Destination Data

#### Demand (PCU/hr)

| 07:30 - 07:45 | From | To              |                            |                    |                            |
|---------------|------|-----------------|----------------------------|--------------------|----------------------------|
|               |      | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|               |      | 0               | 425                        | 125                | 83                         |
|               |      | 215             | 8                          | 402                | 533                        |
|               |      | 103             | 297                        | 0                  | 141                        |
|               |      | 21              | 739                        | 115                | 29                         |

#### Demand (PCU/hr)

| 07:45 - 08:00 | From | To              |                            |                    |                            |
|---------------|------|-----------------|----------------------------|--------------------|----------------------------|
|               |      | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|               |      | 0               | 463                        | 199                | 46                         |
|               |      | 319             | 29                         | 439                | 628                        |
|               |      | 107             | 277                        | 0                  | 187                        |
|               |      | 25              | 718                        | 123                | 25                         |

#### Demand (PCU/hr)

| 08:00 - 08:15 | From | To              |                            |                    |                            |
|---------------|------|-----------------|----------------------------|--------------------|----------------------------|
|               |      | 1 - Milton road | 2 - Hambledon Road (south) | 3 - Elettra Avenue | 4 - Hambledon Road (north) |
|               |      | 0               | 475                        | 174                | 108                        |
|               |      | 327             | 4                          | 481                | 570                        |
|               |      | 194             | 297                        | 0                  | 116                        |
|               |      | 37              | 772                        | 115                | 50                         |

#### 08:15 - 08:30 Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 409                        | 150                | 124                        |
|      | 2 - Hambleton Road (south) | 298             | 37                         | 274                | 632                        |
|      | 3 - Elettra Avenue         | 115             | 388                        | 0                  | 178                        |
|      | 4 - Hambleton Road (north) | 50              | 776                        | 152                | 70                         |

Demand (PCU/hr)

08:30 - 08:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 463                        | 166                | 74                         |
|      | 2 - Hambleton Road (south) | 315             | 50                         | 493                | 723                        |
|      | 3 - Elettra Avenue         | 140             | 339                        | 0                  | 174                        |
|      | 4 - Hambleton Road (north) | 41              | 697                        | 160                | 50                         |

Demand (PCU/hr)

08:45 - 09:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 425                        | 137                | 79                         |
|      | 2 - Hambleton Road (south) | 389             | 41                         | 622                | 707                        |
|      | 3 - Elettra Avenue         | 140             | 355                        | 0                  | 191                        |
|      | 4 - Hambleton Road (north) | 46              | 896                        | 152                | 41                         |

Demand (PCU/hr)

09:00 - 09:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 363                        | 121                | 87                         |
|      | 2 - Hambleton Road (south) | 356             | 46                         | 568                | 773                        |
|      | 3 - Elettra Avenue         | 173             | 438                        | 0                  | 166                        |
|      | 4 - Hambleton Road (north) | 46              | 813                        | 57                 | 87                         |

Demand (PCU/hr)

09:15 - 09:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 351                        | 154                | 29                         |
|      | 2 - Hambleton Road (south) | 364             | 50                         | 402                | 649                        |
|      | 3 - Elettra Avenue         | 173             | 430                        | 0                  | 207                        |
|      | 4 - Hambleton Road (north) | 41              | 652                        | 156                | 50                         |

Vehicle Mix

Heavy Vehicle Percentages

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 0                          | 0                  | 0                          |
|      | 2 - Hambleton Road (south) | 0               | 0                          | 0                  | 0                          |
|      | 3 - Elettra Avenue         | 0               | 0                          | 0                  | 0                          |
|      | 4 - Hambleton Road (north) | 0               | 0                          | 0                  | 0                          |

Results

Results Summary for whole modelled period

| Arm                        | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 57.11         | 13.1            | F       | 653                     | 1306                          |
| 2 - Hambleton Road (south) | 10.37         | 4.7             | B       | 1464                    | 2928                          |
| 3 - Elettra Avenue         | 8.96          | 1.7             | A       | 665                     | 1329                          |
| 4 - Hambleton Road (north) | 10.96         | 3.7             | B       | 977                     | 1955                          |

Main Results for each time segment

07:30 - 07:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 641                   | 160                     | 1191                      | 643                 | 624                         | 345                             | 0.0               | 3.1             | 17.930    | C                             |
| 2 - Hambleton Road (south) | 1151                  | 288                     | 354                       | 1153                | 1158                        | 1480                            | 0.0               | 1.5             | 5.122     | A                             |
| 3 - Elettra Avenue         | 546                   | 136                     | 867                       | 547                 | 544                         | 640                             | 0.0               | 0.7             | 4.976     | A                             |
| 4 - Hambleton Road (north) | 906                   | 227                     | 631                       | 905                 | 903                         | 783                             | 0.0               | 1.7             | 6.330     | A                             |

## 07:45 - 08:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 711                   | 178                     | 1170                      | 705                 | 698                         | 455                             | 3.1               | 5.3             | 24.852    | C                             |
| 2 - Hambledon Road (south) | 1430                  | 357                     | 390                       | 1422                | 1418                        | 1485                            | 1.5               | 3.0             | 6.489     | A                             |
| 3 - Elettra Avenue         | 564                   | 141                     | 1049                      | 563                 | 569                         | 764                             | 0.7               | 1.0             | 5.736     | A                             |
| 4 - Hambledon Road (north) | 892                   | 223                     | 733                       | 891                 | 892                         | 879                             | 1.7               | 1.6             | 6.430     | A                             |

## 08:00 - 08:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 751                   | 188                     | 1235                      | 735                 | 735                         | 556                             | 5.3               | 10.5            | 41.795    | E                             |
| 2 - Hambledon Road (south) | 1392                  | 348                     | 440                       | 1386                | 1383                        | 1529                            | 3.0               | 2.7             | 6.664     | A                             |
| 3 - Elettra Avenue         | 600                   | 150                     | 1072                      | 600                 | 603                         | 754                             | 1.0               | 1.1             | 5.901     | A                             |
| 4 - Hambledon Road (north) | 967                   | 242                     | 820                       | 971                 | 975                         | 852                             | 1.6               | 2.0             | 7.851     | A                             |

## 08:15 - 08:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 687                   | 172                     | 1431                      | 662                 | 667                         | 459                             | 10.5              | 13.1            | 57.110    | F                             |
| 2 - Hambledon Road (south) | 1227                  | 307                     | 491                       | 1229                | 1239                        | 1602                            | 2.7               | 2.2             | 5.876     | A                             |
| 3 - Elettra Avenue         | 679                   | 170                     | 1157                      | 678                 | 676                         | 563                             | 1.1               | 1.3             | 6.663     | A                             |
| 4 - Hambledon Road (north) | 1064                  | 266                     | 828                       | 1062                | 1049                        | 1007                            | 2.0               | 2.8             | 8.964     | A                             |

## 08:30 - 08:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 697                   | 174                     | 1304                      | 716                 | 721                         | 498                             | 13.1              | 8.0             | 53.961    | F                             |
| 2 - Hambledon Road (south) | 1583                  | 396                     | 462                       | 1581                | 1566                        | 1558                            | 2.2               | 3.5             | 7.857     | A                             |
| 3 - Elettra Avenue         | 651                   | 163                     | 1221                      | 651                 | 651                         | 822                             | 1.3               | 1.2             | 6.861     | A                             |
| 4 - Hambledon Road (north) | 953                   | 238                     | 849                       | 953                 | 959                         | 1022                            | 2.8               | 2.0             | 7.842     | A                             |

## 08:45 - 09:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 634                   | 158                     | 1499                      | 625                 | 632                         | 576                             | 8.0               | 8.5             | 42.674    | E                             |
| 2 - Hambledon Road (south) | 1755                  | 439                     | 400                       | 1764                | 1756                        | 1724                            | 3.5               | 4.7             | 10.375    | B                             |
| 3 - Elettra Avenue         | 691                   | 173                     | 1258                      | 690                 | 683                         | 907                             | 1.2               | 1.5             | 7.343     | A                             |
| 4 - Hambledon Road (north) | 1144                  | 286                     | 929                       | 1145                | 1135                        | 1019                            | 2.0               | 3.7             | 10.960    | B                             |

## 09:00 - 09:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 567                   | 142                     | 1443                      | 571                 | 592                         | 579                             | 8.5               | 5.1             | 36.487    | E                             |
| 2 - Hambledon Road (south) | 1720                  | 430                     | 353                       | 1720                | 1737                        | 1660                            | 4.7               | 4.3             | 8.907     | A                             |
| 3 - Elettra Avenue         | 774                   | 194                     | 1330                      | 779                 | 771                         | 743                             | 1.5               | 1.7             | 8.964     | A                             |
| 4 - Hambledon Road (north) | 1002                  | 251                     | 1022                      | 1000                | 1005                        | 1087                            | 3.7               | 2.8             | 9.472     | A                             |

## 09:15 - 09:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 537                   | 134                     | 1326                      | 536                 | 542                         | 574                             | 5.1               | 2.8             | 19.324    | C                             |
| 2 - Hambledon Road (south) | 1456                  | 364                     | 392                       | 1451                | 1466                        | 1470                            | 4.3               | 3.1             | 6.767     | A                             |
| 3 - Elettra Avenue         | 810                   | 203                     | 1137                      | 815                 | 810                         | 706                             | 1.7               | 1.7             | 8.276     | A                             |
| 4 - Hambledon Road (north) | 892                   | 223                     | 1013                      | 887                 | 896                         | 939                             | 2.8               | 2.5             | 8.580     | A                             |

## Lane Results

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

### Lanes: Main Results for each time segment

#### 07:30 - 07:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 276                   | 490               | 0.564 | 277                 | 266                         | 0.0               | 0.9             | 12.482    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 366                   | 490               | 0.747 | 366                 | 358                         | 0.0               | 1.5             | 14.835    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 641                   |                   |       | 643                 | 634                         | 0.0               | 0.6             | 4.073     | A                             |
|                            | Exit  | 1          | 1    |                  | 345                   |                   |       | 345                 | 341                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 628                   | 1150              | 0.546 | 629                 | 632                         | 0.0               | 0.9             | 5.440     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 523                   | 1150              | 0.455 | 524                 | 525                         | 0.0               | 0.6             | 4.738     | A                             |
|                            | Exit  | 1          | 1    |                  | 1480                  |                   |       | 1480                | 1469                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 250                   | 982               | 0.254 | 250                 | 244                         | 0.0               | 0.3             | 4.776     | A                             |
|                            |       |            | 2    | 2, 3             | 296                   | 982               | 0.301 | 297                 | 300                         | 0.0               | 0.4             | 5.138     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 546                   |                   |       | 546                 | 547                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 640                   |                   |       | 640                 | 638                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 430                   | 876               | 0.491 | 429                 | 427                         | 0.0               | 0.8             | 6.009     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 476                   | 876               | 0.544 | 477                 | 476                         | 0.0               | 0.9             | 6.617     | A                             |
|                            | Exit  | 1          | 1    |                  | 783                   |                   |       | 783                 | 783                         | 0.0               | 0.0             | 0.000     | A                             |

#### 07:45 - 08:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 306                   | 497               | 0.615 | 305                 | 300                         | 0.9               | 1.1             | 13.257    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 400                   | 497               | 0.806 | 400                 | 398                         | 1.5               | 1.8             | 16.305    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 711                   |                   |       | 706                 | 700                         | 0.6               | 2.4             | 9.838     | A                             |
|                            | Exit  | 1          | 1    |                  | 455                   |                   |       | 455                 | 453                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 734                   | 1136              | 0.646 | 731                 | 731                         | 0.9               | 1.6             | 6.694     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 696                   | 1136              | 0.613 | 691                 | 687                         | 0.6               | 1.4             | 6.272     | A                             |
|                            | Exit  | 1          | 1    |                  | 1485                  |                   |       | 1485                | 1483                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 287                   | 913               | 0.314 | 287                 | 292                         | 0.3               | 0.5             | 5.924     | A                             |
|                            |       |            | 2    | 2, 3             | 278                   | 913               | 0.304 | 276                 | 277                         | 0.4               | 0.5             | 5.538     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 564                   |                   |       | 564                 | 570                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 764                   |                   |       | 764                 | 760                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 420                   | 842               | 0.499 | 420                 | 419                         | 0.8               | 0.7             | 6.203     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 472                   | 842               | 0.561 | 472                 | 473                         | 0.9               | 0.9             | 6.631     | A                             |
|                            | Exit  | 1          | 1    |                  | 879                   |                   |       | 879                 | 882                         | 0.0               | 0.0             | 0.000     | A                             |

#### 08:00 - 08:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 312                   | 477               | 0.654 | 313                 | 316                         | 1.1               | 1.2             | 14.675    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 422                   | 477               | 0.885 | 422                 | 420                         | 1.8               | 2.3             | 18.760    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 751                   |                   |       | 734                 | 738                         | 2.4               | 6.9             | 24.624    | C                             |
|                            | Exit  | 1          | 1    |                  | 556                   |                   |       | 556                 | 550                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 734                   | 1116              | 0.658 | 730                 | 731                         | 1.6               | 1.5             | 7.065     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 658                   | 1116              | 0.590 | 656                 | 652                         | 1.4               | 1.2             | 6.215     | A                             |
|                            | Exit  | 1          | 1    |                  | 1529                  |                   |       | 1529                | 1540                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 307                   | 904               | 0.340 | 307                 | 306                         | 0.5               | 0.6             | 5.989     | A                             |
|                            |       |            | 2    | 2, 3             | 294                   | 904               | 0.325 | 293                 | 297                         | 0.5               | 0.5             | 5.810     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 600                   |                   |       | 600                 | 603                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 754                   |                   |       | 754                 | 759                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 460                   | 813               | 0.565 | 462                 | 463                         | 0.7               | 0.9             | 7.556     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 507                   | 813               | 0.624 | 509                 | 512                         | 0.9               | 1.1             | 8.118     | A                             |
|                            | Exit  | 1          | 1    |                  | 852                   |                   |       | 852                 | 848                         | 0.0               | 0.0             | 0.000     | A                             |

#### 08:15 - 08:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 279                   | 418               | 0.667 | 280                 | 281                         | 1.2               | 1.3             | 16.872    | C                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 383                   | 418               | 0.917 | 382                 | 386                         | 2.3               | 2.5             | 21.839    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 687                   |                   |       | 662                 | 668                         | 6.9               | 9.4             | 37.288    | E                             |
|                            | Exit  | 1          | 1    |                  | 459                   |                   |       | 459                 | 462                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 3, 4             | 592                   | 1097              | 0.540 | 593                 | 603                         | 1.5               | 1.0             | 5.735     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 635                   | 1097              | 0.579 | 635                 | 635                         | 1.2               | 1.2             | 6.010     | A                             |
|                            | Exit  | 1          | 1    |                  | 1602                  |                   |       | 1602                | 1601                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 298                   | 871               | 0.342 | 297                 | 293                         | 0.6               | 0.5             | 6.201     | A                             |
|                            |       |            | 2    | 2, 3             | 381                   | 871               | 0.438 | 380                 | 383                         | 0.5               | 0.9             | 7.015     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 679                   |                   |       | 679                 | 677                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 563                   |                   |       | 563                 | 572                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1, 2             | 503                   | 811               | 0.621 | 503                 | 495                         | 0.9               | 1.3             | 8.431     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 560                   | 811               | 0.691 | 559                 | 554                         | 1.1               | 1.5             | 9.441     | A                             |
|                            | Exit  | 1          | 1    |                  | 1007                  |                   |       | 1007                | 995                         | 0.0               | 0.0             | 0.000     | A                             |

08:30 - 08:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 309                   | 456               | 0.677 | 311                 | 316                         | 1.3               | 1.3             | 16.633    | C                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 402                   | 456               | 0.881 | 406                 | 406                         | 2.5               | 2.1             | 20.560    | C                             |
|                            | Exit  | 2          | 1    | (1, 2, 3, 4)     | 697                   |                   |       | 711                 | 720                         | 9.4               | 4.6             | 35.229    | E                             |
|                            |       |            | 1    |                  | 498                   |                   |       | 498                 | 493                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 816                   | 1108              | 0.737 | 816                 | 809                         | 1.0               | 1.9             | 8.219     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 767                   | 1108              | 0.692 | 765                 | 757                         | 1.2               | 1.6             | 7.470     | A                             |
|                            | Exit  | 1          | 1    |                  | 1558                  |                   |       | 1558                | 1565                        | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 1    |                  |                       |                   |       |                     |                             |                   |                 |           |                               |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 312                   | 847               | 0.369 | 314                 | 312                         | 0.5               | 0.5             | 6.789     | A                             |
|                            |       |            | 2    | 2, 3             | 339                   | 847               | 0.401 | 337                 | 339                         | 0.9               | 0.7             | 6.905     | A                             |
|                            | Exit  | 2          | 1    | (1, 2, 3, 4)     | 651                   |                   |       | 651                 | 651                         | 0.0               | 0.0             | 0.012     | A                             |
|                            |       |            | 1    |                  | 822                   |                   |       | 822                 | 814                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 445                   | 803               | 0.554 | 444                 | 445                         | 1.3               | 0.9             | 7.400     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 508                   | 803               | 0.632 | 508                 | 514                         | 1.5               | 1.1             | 8.223     | A                             |
|                            | Exit  | 1          | 1    |                  | 1022                  |                   |       | 1022                | 1025                        | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 1    |                  |                       |                   |       |                     |                             |                   |                 |           |                               |

08:45 - 09:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 279                   | 397               | 0.702 | 277                 | 279                         | 1.3               | 1.5             | 17.068    | C                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 351                   | 397               | 0.883 | 349                 | 353                         | 2.1               | 2.3             | 20.842    | C                             |
|                            | Exit  | 2          | 1    | (1, 2, 3, 4)     | 634                   |                   |       | 630                 | 633                         | 4.6               | 4.8             | 23.416    | C                             |
|                            |       |            | 1    |                  | 576                   |                   |       | 576                 | 577                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 909                   | 1132              | 0.803 | 914                 | 914                         | 1.9               | 2.6             | 11.083    | B                             |
|                            |       |            | 2    | 1, 2, 4          | 847                   | 1132              | 0.748 | 850                 | 842                         | 1.6               | 2.1             | 9.605     | A                             |
|                            | Exit  | 1          | 1    |                  | 1724                  |                   |       | 1724                | 1715                        | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 1    |                  |                       |                   |       |                     |                             |                   |                 |           |                               |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 333                   | 832               | 0.400 | 331                 | 328                         | 0.5               | 0.8             | 6.968     | A                             |
|                            |       |            | 2    | 2, 3             | 358                   | 832               | 0.430 | 360                 | 355                         | 0.7               | 0.7             | 7.683     | A                             |
|                            | Exit  | 2          | 1    | (1, 2, 3, 4)     | 691                   |                   |       | 691                 | 685                         | 0.0               | 0.0             | 0.003     | A                             |
|                            |       |            | 1    |                  | 907                   |                   |       | 907                 | 905                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 556                   | 777               | 0.716 | 555                 | 548                         | 0.9               | 1.8             | 10.576    | B                             |
|                            |       |            | 2    | 2, 3, 4          | 587                   | 777               | 0.756 | 590                 | 587                         | 1.1               | 1.9             | 11.319    | B                             |
|                            | Exit  | 1          | 1    |                  | 1019                  |                   |       | 1019                | 1010                        | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 1    |                  |                       |                   |       |                     |                             |                   |                 |           |                               |

09:00 - 09:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 242                   | 414               | 0.584 | 244                 | 252                         | 1.5               | 1.0             | 16.691    | C                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 324                   | 414               | 0.783 | 327                 | 340                         | 2.3               | 1.7             | 20.428    | C                             |
|                            | Exit  | 2          | 1    | (1, 2, 3, 4)     | 567                   |                   |       | 567                 | 588                         | 4.8               | 2.4             | 17.813    | C                             |
|                            |       |            | 1    |                  | 579                   |                   |       | 579                 | 577                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 883                   | 1150              | 0.768 | 884                 | 898                         | 2.6               | 2.4             | 9.479     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 837                   | 1150              | 0.728 | 837                 | 839                         | 2.1               | 2.0             | 8.294     | A                             |
|                            | Exit  | 1          | 1    |                  | 1660                  |                   |       | 1660                | 1671                        | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 1    |                  |                       |                   |       |                     |                             |                   |                 |           |                               |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 335                   | 805               | 0.417 | 337                 | 340                         | 0.8               | 0.6             | 8.021     | A                             |
|                            |       |            | 2    | 2, 3             | 439                   | 805               | 0.546 | 441                 | 431                         | 0.7               | 1.1             | 9.700     | A                             |
|                            | Exit  | 2          | 1    | (1, 2, 3, 4)     | 774                   |                   |       | 774                 | 772                         | 0.0               | 0.0             | 0.001     | A                             |
|                            |       |            | 1    |                  | 743                   |                   |       | 743                 | 751                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 487                   | 746               | 0.653 | 487                 | 487                         | 1.8               | 1.3             | 9.180     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 515                   | 746               | 0.690 | 513                 | 518                         | 1.9               | 1.5             | 9.746     | A                             |
|                            | Exit  | 1          | 1    |                  | 1087                  |                   |       | 1087                | 1107                        | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 1    |                  |                       |                   |       |                     |                             |                   |                 |           |                               |

09:15 - 09:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 225                   | 450               | 0.501 | 224                 | 228                         | 1.0               | 0.8             | 13.129    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 312                   | 450               | 0.693 | 312                 | 314                         | 1.7               | 1.4             | 15.965    | C                             |
|                            | Exit  | 2          | 1    | (1, 2, 3, 4)     | 537                   |                   |       | 537                 | 541                         | 2.4               | 0.6             | 4.664     | A                             |
|                            |       |            | 1    |                  | 574                   |                   |       | 574                 | 579                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 725                   | 1135              | 0.638 | 724                 | 729                         | 2.4               | 1.4             | 6.684     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 731                   | 1135              | 0.644 | 727                 | 737                         | 2.0               | 1.6             | 6.850     | A                             |
|                            | Exit  | 1          | 1    |                  | 1470                  |                   |       | 1470                | 1483                        | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 1    |                  |                       |                   |       |                     |                             |                   |                 |           |                               |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 383                   | 879               | 0.436 | 386                 | 381                         | 0.6               | 0.7             | 7.678     | A                             |
|                            |       |            | 2    | 2, 3             | 427                   | 879               | 0.486 | 429                 | 429                         | 1.1               | 1.0             | 8.772     | A                             |
|                            | Exit  | 2          | 1    | (1, 2, 3, 4)     | 810                   |                   |       | 810                 | 809                         | 0.0               | 0.0             | 0.019     | A                             |
|                            |       |            | 1    |                  | 706                   |                   |       | 706                 | 713                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 411                   | 749               | 0.549 | 409                 | 416                         | 1.3               | 1.2             | 7.946     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 480                   | 749               | 0.641 | 478                 | 480                         | 1.5               | 1.3             | 9.128     | A                             |
|                            | Exit  | 1          | 1    |                  | 939                   |                   |       | 939                 | 939                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 1    |                  |                       |                   |       |                     |                             |                   |                 |           |                               |

## Lane movements: Main Results for each time segment

07:30 - 07:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 276                   | 69                      | 850                          | 491               | 0.563 | 277                 | 266                         | 0.0               | 0.9             | 12.482    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 152                   | 38                      | 850                          | 490               | 0.310 | 153                 | 154                         | 0.0               | 0.5             | 12.791    | B                             |
|                            |       |            |      | 3      | 129                   | 32                      | 850                          | 491               | 0.263 | 128                 | 122                         | 0.0               | 0.7             | 16.285    | C                             |
|                            |       |            |      | 4      | 85                    | 21                      | 850                          | 492               | 0.173 | 85                  | 82                          | 0.0               | 0.4             | 16.479    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 427                   | 107                     | -                            | -                 | -     | 428                 | 426                         | 0.0               | 0.3             | 3.645     | A                             |
|                            |       |            |      | 3      | 130                   | 32                      | -                            | -                 | -     | 129                 | 125                         | 0.0               | 0.2             | 4.861     | A                             |
|                            |       |            |      | 4      | 85                    | 21                      | -                            | -                 | -     | 85                  | 84                          | 0.0               | 0.1             | 5.073     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 400                   | 100                     | 1286                         | 1149              | 0.348 | 399                 | 402                         | 0.0               | 0.7             | 6.045     | A                             |
|                            |       |            |      | 4      | 228                   | 57                      | 1286                         | 1150              | 0.199 | 230                 | 230                         | 0.0               | 0.2             | 4.379     | A                             |
|                            |       | 2          | 1    | 1      | 223                   | 56                      | 1286                         | 1149              | 0.194 | 223                 | 217                         | 0.0               | 0.3             | 5.249     | A                             |
|                            |       |            |      | 2      | 8                     | 2                       | 1099                         | 986               | 0.008 | 8                   | 8                           | 0.0               | 0.0             | 5.084     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 292                   | 73                      | 1286                         | 1150              | 0.254 | 292                 | 300                         | 0.0               | 0.4             | 4.358     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 102                   | 26                      | 1314                         | 981               | 0.104 | 103                 | 102                         | 0.0               | 0.1             | 4.726     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 147                   | 37                      | 1314                         | 982               | 0.150 | 147                 | 142                         | 0.0               | 0.2             | 4.812     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 296                   | 74                      | 1314                         | 982               | 0.301 | 297                 | 300                         | 0.0               | 0.4             | 5.138     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 102                   | 26                      | -                            | -                 | -     | 102                 | 103                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 296                   | 74                      | -                            | -                 | -     | 296                 | 302                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 147                   | 37                      | -                            | -                 | -     | 147                 | 143                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 20                    | 5                       | 1086                         | 876               | 0.023 | 20                  | 21                          | 0.0               | 0.0             | 7.163     | A                             |
|                            |       |            |      | 2      | 410                   | 102                     | 1086                         | 876               | 0.468 | 409                 | 406                         | 0.0               | 0.8             | 5.949     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 334                   | 84                      | 1086                         | 876               | 0.382 | 335                 | 335                         | 0.0               | 0.6             | 6.116     | A                             |
|                            |       |            |      | 3      | 113                   | 28                      | 1086                         | 876               | 0.129 | 113                 | 113                         | 0.0               | 0.2             | 7.840     | A                             |
|                            |       |            |      | 4      | 29                    | 7                       | 1086                         | 875               | 0.033 | 29                  | 29                          | 0.0               | 0.1             | 7.619     | A                             |

07:45 - 08:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 306                   | 76                      | 850                          | 497               | 0.615 | 305                 | 300                         | 0.9               | 1.1             | 13.257    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 156                   | 39                      | 850                          | 496               | 0.315 | 156                 | 157                         | 0.5               | 0.7             | 14.552    | B                             |
|                            |       |            |      | 3      | 198                   | 50                      | 850                          | 498               | 0.398 | 197                 | 195                         | 0.7               | 0.9             | 17.460    | C                             |
|                            |       |            |      | 4      | 46                    | 12                      | 850                          | 498               | 0.093 | 47                  | 46                          | 0.4               | 0.2             | 17.394    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 465                   | 116                     | -                            | -                 | -     | 462                 | 459                         | 0.3               | 1.5             | 9.166     | A                             |
|                            |       |            |      | 3      | 199                   | 50                      | -                            | -                 | -     | 198                 | 196                         | 0.2               | 0.8             | 11.080    | B                             |
|                            |       |            |      | 4      | 46                    | 12                      | -                            | -                 | -     | 46                  | 45                          | 0.1               | 0.2             | 11.254    | B                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 446                   | 112                     | 1286                         | 1135              | 0.393 | 445                 | 441                         | 0.7               | 1.0             | 7.477     | A                             |
|                            |       |            |      | 4      | 287                   | 72                      | 1286                         | 1136              | 0.253 | 286                 | 290                         | 0.2               | 0.5             | 5.506     | A                             |
|                            |       |            | 2    | 1      | 327                   | 82                      | 1286                         | 1136              | 0.288 | 325                 | 322                         | 0.3               | 0.7             | 6.950     | A                             |
|                            |       |            |      | 2      | 28                    | 7                       | 1286                         | 1134              | 0.024 | 28                  | 29                          | 0.0               | 0.1             | 6.970     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 341                   | 85                      | 1286                         | 1136              | 0.300 | 339                 | 336                         | 0.4               | 0.6             | 5.561     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 104                   | 26                      | 1314                         | 913               | 0.114 | 104                 | 106                         | 0.1               | 0.2             | 5.980     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 182                   | 46                      | 1314                         | 913               | 0.200 | 183                 | 185                         | 0.2               | 0.3             | 5.892     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 278                   | 69                      | 1314                         | 914               | 0.304 | 276                 | 277                         | 0.4               | 0.5             | 5.538     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 104                   | 26                      | -                            | -                 | -     | 104                 | 106                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 278                   | 69                      | -                            | -                 | -     | 278                 | 278                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 182                   | 46                      | -                            | -                 | -     | 182                 | 186                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 25                    | 6                       | 1086                         | 843               | 0.030 | 26                  | 25                          | 0.0               | 0.0             | 7.128     | A                             |
|                            |       |            |      | 2      | 395                   | 99                      | 1086                         | 842               | 0.469 | 394                 | 394                         | 0.8               | 0.7             | 6.145     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 326                   | 81                      | 1086                         | 842               | 0.387 | 326                 | 325                         | 0.6               | 0.5             | 6.068     | A                             |
|                            |       |            |      | 3      | 122                   | 31                      | 1086                         | 842               | 0.145 | 121                 | 124                         | 0.2               | 0.4             | 7.826     | A                             |
|                            |       |            |      | 4      | 24                    | 6                       | 1080                         | 840               | 0.029 | 24                  | 24                          | 0.1               | 0.1             | 8.068     | A                             |

08:00 - 08:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 312                   | 78                      | 850                          | 478               | 0.654 | 313                 | 316                         | 1.1               | 1.2             | 14.675    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 142                   | 36                      | 850                          | 476               | 0.298 | 143                 | 147                         | 0.7               | 0.7             | 16.808    | C                             |
|                            |       |            |      | 3      | 172                   | 43                      | 850                          | 477               | 0.360 | 171                 | 169                         | 0.9               | 1.0             | 19.909    | C                             |
|                            |       |            |      | 4      | 108                   | 27                      | 850                          | 476               | 0.227 | 108                 | 103                         | 0.2               | 0.6             | 19.651    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 464                   | 116                     | -                            | -                 | -     | 454                 | 464                         | 1.5               | 4.1             | 23.464    | C                             |
|                            |       |            |      | 3      | 176                   | 44                      | -                            | -                 | -     | 172                 | 170                         | 0.8               | 1.7             | 26.417    | D                             |
|                            |       |            |      | 4      | 111                   | 28                      | -                            | -                 | -     | 108                 | 104                         | 0.2               | 1.1             | 26.827    | D                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 475                   | 119                     | 1286                         | 1117              | 0.425 | 473                 | 476                         | 1.0               | 1.1             | 7.921     | A                             |
|                            |       |            |      | 4      | 259                   | 65                      | 1286                         | 1116              | 0.232 | 257                 | 255                         | 0.5               | 0.4             | 5.463     | A                             |
|                            |       |            | 2    | 1      | 333                   | 83                      | 1286                         | 1116              | 0.298 | 332                 | 327                         | 0.7               | 0.6             | 6.888     | A                             |
|                            |       |            |      | 2      | 4                     | 0.89                    | 829                          | 722               | 0.005 | 3                   | 4                           | 0.1               | 0.0             | 6.288     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 322                   | 80                      | 1286                         | 1116              | 0.288 | 320                 | 322                         | 0.6               | 0.6             | 5.532     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 190                   | 48                      | 1314                         | 904               | 0.210 | 191                 | 188                         | 0.2               | 0.4             | 6.028     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 117                   | 29                      | 1314                         | 906               | 0.129 | 116                 | 118                         | 0.3               | 0.2             | 5.927     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 294                   | 73                      | 1314                         | 904               | 0.325 | 293                 | 297                         | 0.5               | 0.5             | 5.810     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 190                   | 48                      | -                            | -                 | -     | 190                 | 188                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 294                   | 73                      | -                            | -                 | -     | 294                 | 297                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 117                   | 29                      | -                            | -                 | -     | 117                 | 118                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 34                    | 9                       | 1086                         | 810               | 0.042 | 33                  | 36                          | 0.0               | 0.1             | 8.547     | A                             |
|                            |       |            |      | 2      | 426                   | 106                     | 1086                         | 813               | 0.524 | 428                 | 427                         | 0.7               | 0.8             | 7.472     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 347                   | 87                      | 1086                         | 813               | 0.427 | 348                 | 348                         | 0.5               | 0.7             | 7.457     | A                             |
|                            |       |            |      | 3      | 109                   | 27                      | 1086                         | 814               | 0.134 | 111                 | 114                         | 0.4               | 0.2             | 9.486     | A                             |
|                            |       |            |      | 4      | 51                    | 13                      | 1086                         | 813               | 0.063 | 51                  | 50                          | 0.1               | 0.2             | 9.617     | A                             |

08:15 - 08:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 279                   | 70                      | 850                          | 417               | 0.669 | 280                 | 281                         | 1.2               | 1.3             | 16.872    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 119                   | 30                      | 850                          | 418               | 0.285 | 117                 | 120                         | 0.7               | 0.8             | 19.725    | C                             |
|                            |       |            |      | 3      | 144                   | 36                      | 850                          | 419               | 0.345 | 145                 | 147                         | 1.0               | 0.9             | 22.782    | C                             |
|                            |       |            |      | 4      | 120                   | 30                      | 850                          | 419               | 0.287 | 121                 | 118                         | 0.6               | 0.8             | 22.826    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 412                   | 103                     | -                            | -                 | -     | 398                 | 402                         | 4.1               | 5.5             | 35.600    | E                             |
|                            |       |            |      | 3      | 149                   | 37                      | -                            | -                 | -     | 144                 | 147                         | 1.7               | 2.1             | 39.638    | E                             |
|                            |       |            |      | 4      | 126                   | 31                      | -                            | -                 | -     | 120                 | 119                         | 1.1               | 1.8             | 40.083    | E                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 264                   | 66                      | 1286                         | 1098              | 0.241 | 263                 | 273                         | 1.1               | 0.5             | 6.538     | A                             |
|                            |       |            |      | 4      | 328                   | 82                      | 1286                         | 1096              | 0.299 | 330                 | 330                         | 0.4               | 0.5             | 5.073     | A                             |
|                            |       |            | 2    | 1      | 293                   | 73                      | 1286                         | 1097              | 0.267 | 293                 | 298                         | 0.6               | 0.7             | 6.783     | A                             |
|                            |       |            |      | 2      | 37                    | 9                       | 1286                         | 1093              | 0.034 | 37                  | 37                          | 0.0               | 0.1             | 6.872     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 304                   | 76                      | 1286                         | 1096              | 0.278 | 305                 | 300                         | 0.6               | 0.5             | 5.134     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 117                   | 29                      | 1314                         | 869               | 0.135 | 117                 | 115                         | 0.4               | 0.2             | 6.192     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 181                   | 45                      | 1314                         | 872               | 0.207 | 180                 | 178                         | 0.2               | 0.3             | 6.208     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 381                   | 95                      | 1314                         | 872               | 0.437 | 380                 | 383                         | 0.5               | 0.9             | 7.015     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 117                   | 29                      | -                            | -                 | -     | 117                 | 114                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 381                   | 95                      | -                            | -                 | -     | 381                 | 385                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 181                   | 45                      | -                            | -                 | -     | 181                 | 178                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 49                    | 12                      | 1086                         | 809               | 0.061 | 49                  | 49                          | 0.1               | 0.2             | 9.816     | A                             |
|                            |       |            |      | 2      | 454                   | 114                     | 1086                         | 811               | 0.561 | 454                 | 447                         | 0.8               | 1.1             | 8.280     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 335                   | 84                      | 1086                         | 811               | 0.413 | 333                 | 333                         | 0.7               | 0.8             | 8.342     | A                             |
|                            |       |            |      | 3      | 154                   | 39                      | 1086                         | 809               | 0.191 | 155                 | 152                         | 0.2               | 0.4             | 11.097    | B                             |
|                            |       |            |      | 4      | 71                    | 18                      | 1086                         | 809               | 0.088 | 71                  | 69                          | 0.2               | 0.2             | 11.090    | B                             |

08:30 - 08:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 309                   | 77                      | 850                          | 457               | 0.677 | 311                 | 316                         | 1.3               | 1.3             | 16.633    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 153                   | 38                      | 850                          | 457               | 0.335 | 154                 | 155                         | 0.8               | 0.8             | 19.141    | C                             |
|                            |       |            |      | 3      | 169                   | 42                      | 850                          | 457               | 0.371 | 171                 | 168                         | 0.9               | 0.9             | 21.516    | C                             |
|                            |       |            |      | 4      | 79                    | 20                      | 850                          | 458               | 0.173 | 81                  | 83                          | 0.8               | 0.4             | 21.285    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 456                   | 114                     | -                            | -                 | -     | 462                 | 471                         | 5.5               | 3.1             | 33.898    | D                             |
|                            |       |            |      | 3      | 163                   | 41                      | -                            | -                 | -     | 169                 | 168                         | 2.1               | 1.1             | 37.840    | E                             |
|                            |       |            |      | 4      | 77                    | 19                      | -                            | -                 | -     | 79                  | 81                          | 1.8               | 0.5             | 37.671    | E                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 492                   | 123                     | 1286                         | 1108              | 0.444 | 492                 | 486                         | 0.5               | 1.3             | 9.144     | A                             |
|                            |       |            |      | 4      | 324                   | 81                      | 1286                         | 1108              | 0.293 | 324                 | 323                         | 0.5               | 0.6             | 6.822     | A                             |
|                            |       |            | 2    | 1      | 318                   | 80                      | 1286                         | 1108              | 0.287 | 318                 | 312                         | 0.7               | 0.7             | 8.202     | A                             |
|                            |       |            |      | 2      | 53                    | 13                      | 1286                         | 1108              | 0.048 | 53                  | 49                          | 0.1               | 0.1             | 8.255     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 395                   | 99                      | 1286                         | 1108              | 0.357 | 394                 | 395                         | 0.5               | 0.8             | 6.795     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 141                   | 35                      | 1314                         | 846               | 0.167 | 142                 | 139                         | 0.2               | 0.2             | 6.830     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 171                   | 43                      | 1314                         | 847               | 0.202 | 172                 | 173                         | 0.3               | 0.3             | 6.756     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 339                   | 85                      | 1314                         | 848               | 0.400 | 337                 | 339                         | 0.9               | 0.7             | 6.905     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 141                   | 35                      | -                            | -                 | -     | 141                 | 139                         | 0.0               | 0.0             | 0.020     | A                             |
|                            |       |            |      | 2      | 339                   | 85                      | -                            | -                 | -     | 339                 | 338                         | 0.0               | 0.0             | 0.012     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 171                   | 43                      | -                            | -                 | -     | 171                 | 173                         | 0.0               | 0.0             | 0.006     | A                             |
|                            |       |            | 2    | 1      | 38                    | 9                       | 1086                         | 803               | 0.047 | 38                  | 42                          | 0.2               | 0.1             | 8.776     | A                             |
|                            |       |            |      | 2      | 407                   | 102                     | 1086                         | 804               | 0.507 | 406                 | 403                         | 1.1               | 0.8             | 7.257     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 297                   | 74                      | 1086                         | 803               | 0.370 | 297                 | 303                         | 0.8               | 0.6             | 7.300     | A                             |
|                            |       |            |      | 3      | 160                   | 40                      | 1086                         | 803               | 0.199 | 160                 | 160                         | 0.4               | 0.4             | 9.575     | A                             |
|                            |       |            |      | 4      | 51                    | 13                      | 1086                         | 804               | 0.063 | 51                  | 51                          | 0.2               | 0.1             | 9.462     | A                             |

08:45 - 09:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 279                   | 70                      | 850                          | 398               | 0.701 | 277                 | 279                         | 1.3               | 1.5             | 17.068    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 145                   | 36                      | 850                          | 398               | 0.363 | 143                 | 142                         | 0.8               | 0.8             | 18.809    | C                             |
|                            |       |            |      | 3      | 128                   | 32                      | 850                          | 397               | 0.323 | 128                 | 135                         | 0.9               | 0.8             | 22.138    | C                             |
|                            |       |            |      | 4      | 78                    | 20                      | 850                          | 399               | 0.196 | 77                  | 77                          | 0.4               | 0.6             | 22.318    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 426                   | 106                     | -                            | -                 | -     | 424                 | 421                         | 3.1               | 3.0             | 22.319    | C                             |
|                            |       |            |      | 3      | 129                   | 32                      | -                            | -                 | -     | 128                 | 134                         | 1.1               | 1.1             | 25.479    | D                             |
|                            |       |            |      | 4      | 79                    | 20                      | -                            | -                 | -     | 78                  | 78                          | 0.5               | 0.6             | 25.771    | D                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 618                   | 154                     | 1286                         | 1132              | 0.546 | 624                 | 621                         | 1.3               | 1.9             | 12.180    | B                             |
|                            |       |            |      | 4      | 291                   | 73                      | 1286                         | 1132              | 0.257 | 291                 | 293                         | 0.6               | 0.7             | 8.751     | A                             |
|                            |       |            | 2    | 1      | 385                   | 96                      | 1286                         | 1132              | 0.340 | 386                 | 389                         | 0.7               | 1.1             | 10.578    | B                             |
|                            |       |            |      | 2      | 41                    | 10                      | 1286                         | 1130              | 0.037 | 42                  | 42                          | 0.1               | 0.1             | 10.538    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 420                   | 105                     | 1286                         | 1132              | 0.371 | 422                 | 412                         | 0.8               | 0.9             | 8.591     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 142                   | 36                      | 1314                         | 835               | 0.170 | 141                 | 142                         | 0.2               | 0.3             | 7.030     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 191                   | 48                      | 1314                         | 832               | 0.230 | 189                 | 186                         | 0.3               | 0.5             | 6.921     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 358                   | 90                      | 1314                         | 833               | 0.430 | 360                 | 355                         | 0.7               | 0.7             | 7.683     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 142                   | 36                      | -                            | -                 | -     | 142                 | 142                         | 0.0               | 0.0             | 0.004     | A                             |
|                            |       |            |      | 2      | 358                   | 90                      | -                            | -                 | -     | 358                 | 355                         | 0.0               | 0.0             | 0.004     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 191                   | 48                      | -                            | -                 | -     | 191                 | 187                         | 0.0               | 0.0             | 0.002     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 49                    | 12                      | 1086                         | 780               | 0.063 | 48                  | 46                          | 0.1               | 0.2             | 12.320    | B                             |
|                            |       |            |      | 2      | 508                   | 127                     | 1086                         | 777               | 0.653 | 507                 | 502                         | 0.8               | 1.6             | 10.415    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 393                   | 98                      | 1086                         | 777               | 0.506 | 395                 | 396                         | 0.6               | 1.2             | 10.516    | B                             |
|                            |       |            |      | 3      | 154                   | 39                      | 1086                         | 778               | 0.198 | 155                 | 150                         | 0.4               | 0.6             | 12.951    | B                             |
|                            |       |            |      | 4      | 40                    | 10                      | 1086                         | 781               | 0.051 | 40                  | 42                          | 0.1               | 0.2             | 13.089    | B                             |

09:00 - 09:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 242                   | 61                      | 850                          | 415               | 0.584 | 244                 | 252                         | 1.5               | 1.0             | 16.691    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 118                   | 30                      | 850                          | 415               | 0.284 | 120                 | 127                         | 0.8               | 0.5             | 18.215    | C                             |
|                            |       |            |      | 3      | 122                   | 31                      | 850                          | 414               | 0.295 | 122                 | 124                         | 0.8               | 0.6             | 21.848    | C                             |
|                            |       |            |      | 4      | 84                    | 21                      | 850                          | 415               | 0.204 | 84                  | 88                          | 0.6               | 0.5             | 21.611    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 360                   | 90                      | -                            | -                 | -     | 360                 | 377                         | 3.0               | 1.4             | 17.172    | C                             |
|                            |       |            |      | 3      | 122                   | 30                      | -                            | -                 | -     | 122                 | 124                         | 1.1               | 0.5             | 19.000    | C                             |
|                            |       |            |      | 4      | 85                    | 21                      | -                            | -                 | -     | 84                  | 88                          | 0.6               | 0.4             | 18.889    | C                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 563                   | 141                     | 1286                         | 1149              | 0.490 | 562                 | 566                         | 1.9               | 1.7             | 10.518    | B                             |
|                            |       |            |      | 4      | 320                   | 80                      | 1286                         | 1150              | 0.278 | 321                 | 331                         | 0.7               | 0.6             | 7.705     | A                             |
|                            |       |            | 2    | 1      | 358                   | 89                      | 1286                         | 1149              | 0.311 | 360                 | 358                         | 1.1               | 0.8             | 9.082     | A                             |
|                            |       |            |      | 2      | 47                    | 12                      | 1286                         | 1151              | 0.041 | 47                  | 47                          | 0.1               | 0.1             | 9.442     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 432                   | 108                     | 1286                         | 1150              | 0.375 | 431                 | 434                         | 0.9               | 1.0             | 7.523     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 173                   | 43                      | 1314                         | 805               | 0.215 | 174                 | 173                         | 0.3               | 0.3             | 7.956     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 162                   | 41                      | 1314                         | 803               | 0.202 | 163                 | 167                         | 0.5               | 0.3             | 8.090     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 439                   | 110                     | 1314                         | 805               | 0.546 | 441                 | 431                         | 0.7               | 1.1             | 9.700     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 173                   | 43                      | -                            | -                 | -     | 173                 | 173                         | 0.0               | 0.0             | 0.003     | A                             |
|                            |       |            |      | 2      | 439                   | 110                     | -                            | -                 | -     | 439                 | 433                         | 0.0               | 0.0             | 0.001     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 162                   | 41                      | -                            | -                 | -     | 162                 | 166                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 46                    | 12                      | 1086                         | 747               | 0.062 | 45                  | 46                          | 0.2               | 0.1             | 10.588    | B                             |
|                            |       |            |      | 2      | 441                   | 110                     | 1086                         | 746               | 0.591 | 442                 | 442                         | 1.6               | 1.2             | 9.034     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

09:15 - 09:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 225                   | 56                      | 850                          | 450               | 0.500 | 224                 | 228                         | 1.0               | 0.8             | 13.129    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 127                   | 32                      | 850                          | 451               | 0.282 | 128                 | 128                         | 0.5               | 0.5             | 13.707    | B                             |
|                            |       |            |      | 3      | 155                   | 39                      | 850                          | 450               | 0.345 | 155                 | 154                         | 0.6               | 0.8             | 17.366    | C                             |
|                            |       |            |      | 4      | 29                    | 7                       | 850                          | 450               | 0.065 | 30                  | 33                          | 0.5               | 0.1             | 18.291    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 353                   | 88                      | -                            | -                 | -     | 352                 | 355                         | 1.4               | 0.3             | 4.180     | A                             |
|                            |       |            |      | 3      | 155                   | 39                      | -                            | -                 | -     | 155                 | 155                         | 0.5               | 0.2             | 5.562     | A                             |
|                            |       |            |      | 4      | 29                    | 7                       | -                            | -                 | -     | 29                  | 31                          | 0.4               | 0.0             | 5.747     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 397                   | 99                      | 1286                         | 1135              | 0.350 | 397                 | 403                         | 1.7               | 0.9             | 7.430     | A                             |
|                            |       |            |      | 4      | 327                   | 82                      | 1286                         | 1134              | 0.288 | 327                 | 326                         | 0.6               | 0.6             | 5.767     | A                             |
|                            |       |            | 2    | 1      | 364                   | 91                      | 1286                         | 1134              | 0.321 | 363                 | 367                         | 0.8               | 0.8             | 7.609     | A                             |
|                            |       |            |      | 2      | 49                    | 12                      | 1286                         | 1134              | 0.043 | 49                  | 49                          | 0.1               | 0.1             | 7.349     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 318                   | 80                      | 1286                         | 1135              | 0.281 | 316                 | 320                         | 1.0               | 0.7             | 5.898     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 172                   | 43                      | 1314                         | 878               | 0.196 | 173                 | 172                         | 0.3               | 0.3             | 7.770     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 211                   | 53                      | 1314                         | 879               | 0.240 | 213                 | 209                         | 0.3               | 0.3             | 7.602     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 427                   | 107                     | 1314                         | 879               | 0.486 | 429                 | 429                         | 1.1               | 1.0             | 8.772     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 172                   | 43                      | -                            | -                 | -     | 172                 | 172                         | 0.0               | 0.0             | 0.017     | A                             |
|                            |       |            |      | 2      | 427                   | 107                     | -                            | -                 | -     | 427                 | 428                         | 0.0               | 0.0             | 0.023     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 211                   | 53                      | -                            | -                 | -     | 211                 | 209                         | 0.0               | 0.0             | 0.012     | A                             |
|                            |       |            | 2    | 1      | 39                    | 10                      | 1086                         | 747               | 0.053 | 39                  | 40                          | 0.1               | 0.1             | 9.139     | A                             |
|                            |       |            |      | 2      | 372                   | 93                      | 1086                         | 748               | 0.497 | 370                 | 376                         | 1.2               | 1.0             | 7.819     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 271                   | 68                      | 1086                         | 749               | 0.362 | 270                 | 273                         | 1.1               | 0.7             | 7.809     | A                             |
|                            |       |            |      | 3      | 155                   | 39                      | 1086                         | 748               | 0.207 | 154                 | 155                         | 0.2               | 0.5             | 10.819    | B                             |
|                            |       |            |      | 4      | 54                    | 13                      | 1086                         | 749               | 0.072 | 54                  | 52                          | 0.3               | 0.2             | 10.965    | B                             |

(Default Analysis Set) - 2026 Base + Com Dev, AM  
DIRECT

Data Errors and Warnings

| Severity | Area            | Item                                     | Description                                                                                                                                                                                  |
|----------|-----------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Warning  | Geometry        | 3 - Elettra Avenue - Roundabout Geometry | Effective flare length is over 30m, which is outside the normal range. Treat capacities with increasing caution.                                                                             |
| Warning  | Vehicle Mix     |                                          | HV% is zero for all movements / time segments. Vehicle Mix matrix should be completed whether working in PCUs or Vehs. If HV% at the junction is genuinely zero, please ignore this warning. |
| Info     | Lane Simulation | A1 [Lane Simulation]                     | This analysis set uses Lane Simulation mode. For detailed information on this mode, please see the User Guide.                                                                               |

Junction Network

Junctions

| Junction | Name       | Junction type       | Use circulating lanes | Arm order  | Junction Delay (s) | Junction LOS |
|----------|------------|---------------------|-----------------------|------------|--------------------|--------------|
| 1        | (untitled) | Standard Roundabout |                       | 1, 2, 3, 4 | 13.09              | B            |

Junction Network

| Driving side | Lighting       | Network delay (s) | Network LOS |
|--------------|----------------|-------------------|-------------|
| Left         | Normal/unknown | 13.09             | B           |

Traffic Demand

Demand Set Details

| ID  | Scenario name       | Time Period name | Traffic profile type | Start time (HH:mm) | Finish time (HH:mm) | Time period length (min) | Time segment length (min) | Run automatically |
|-----|---------------------|------------------|----------------------|--------------------|---------------------|--------------------------|---------------------------|-------------------|
| D14 | 2026 Base + Com Dev | AM DIRECT        | DIRECT               | 07:30              | 09:30               | 120                      | 15                        | ✓                 |

| Vehicle mix varies over turn | Vehicle mix varies over entry | Vehicle mix source | PCU Factor for a HV (PCU) | O-D data varies over time |
|------------------------------|-------------------------------|--------------------|---------------------------|---------------------------|
| ✓                            | ✓                             | HV Percentages     | 2.00                      | ✓                         |

Demand overview (Traffic)

| Arm                        | Linked arm | Profile type | Use O-D data | Scaling Factor (%) |
|----------------------------|------------|--------------|--------------|--------------------|
| 1 - Milton road            |            | DIRECT       | ✓            | 100.000            |
| 2 - Hambleton Road (south) |            | DIRECT       | ✓            | 100.000            |
| 3 - Elettra Avenue         |            | DIRECT       | ✓            | 100.000            |
| 4 - Hambleton Road (north) |            | DIRECT       | ✓            | 100.000            |

Origin-Destination Data

Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 430                        | 104                | 83                         |
|      | 2 - Hambleton Road (south) | 219             | 8                          | 288                | 534                        |
|      | 3 - Elettra Avenue         | 90              | 225                        | 0                  | 131                        |
|      | 4 - Hambleton Road (north) | 21              | 741                        | 97                 | 29                         |

Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
|      | 1 - Milton road            | 0               | 468                        | 178                | 46                         |
|      | 2 - Hambleton Road (south) | 323             | 29                         | 325                | 629                        |
|      | 3 - Elettra Avenue         | 94              | 204                        | 0                  | 177                        |
|      | 4 - Hambleton Road (north) | 25              | 720                        | 106                | 25                         |

Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
| From |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
|      | 1 - Milton road            | 0               | 480                        | 153                | 108                        |
|      | 2 - Hambleton Road (south) | 331             | 4                          | 367                | 571                        |
|      | 3 - Elettra Avenue         | 181             | 225                        | 0                  | 106                        |
|      | 4 - Hambleton Road (north) | 37              | 774                        | 97                 | 50                         |

08:15 - 08:30

Demand (PCU/hr)

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 414                        | 128                | 124                        |
|      | 2 - Hambleton Road (south) | 302             | 37                         | 160                | 633                        |
|      | 3 - Elettra Avenue         | 102             | 316                        | 0                  | 168                        |
|      | 4 - Hambleton Road (north) | 50              | 778                        | 135                | 70                         |

**Demand (PCU/hr)**

08:30 - 08:45

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 468                        | 145                | 74                         |
|      | 2 - Hambleton Road (south) | 319             | 50                         | 379                | 724                        |
|      | 3 - Elettra Avenue         | 127             | 266                        | 0                  | 164                        |
|      | 4 - Hambleton Road (north) | 41              | 699                        | 143                | 50                         |

**Demand (PCU/hr)**

08:45 - 09:00

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 430                        | 116                | 79                         |
|      | 2 - Hambleton Road (south) | 393             | 41                         | 507                | 708                        |
|      | 3 - Elettra Avenue         | 127             | 283                        | 0                  | 181                        |
|      | 4 - Hambleton Road (north) | 46              | 898                        | 135                | 41                         |

**Demand (PCU/hr)**

09:00 - 09:15

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 368                        | 99                 | 87                         |
|      | 2 - Hambleton Road (south) | 360             | 46                         | 454                | 774                        |
|      | 3 - Elettra Avenue         | 160             | 365                        | 0                  | 156                        |
|      | 4 - Hambleton Road (north) | 46              | 815                        | 40                 | 87                         |

**Demand (PCU/hr)**

09:15 - 09:30

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 351                        | 154                | 29                         |
|      | 2 - Hambleton Road (south) | 364             | 50                         | 402                | 649                        |
|      | 3 - Elettra Avenue         | 173             | 430                        | 0                  | 207                        |
|      | 4 - Hambleton Road (north) | 41              | 652                        | 156                | 0                          |

## Vehicle Mix

**Heavy Vehicle Percentages**

|      | To                         |                 |                            |                    |                            |
|------|----------------------------|-----------------|----------------------------|--------------------|----------------------------|
|      |                            | 1 - Milton road | 2 - Hambleton Road (south) | 3 - Elettra Avenue | 4 - Hambleton Road (north) |
| From | 1 - Milton road            | 0               | 0                          | 0                  | 0                          |
|      | 2 - Hambleton Road (south) | 0               | 0                          | 0                  | 0                          |
|      | 3 - Elettra Avenue         | 0               | 0                          | 0                  | 0                          |
|      | 4 - Hambleton Road (north) | 0               | 0                          | 0                  | 0                          |

## Results

**Results Summary for whole modelled period**

| Arm                        | Max Delay (s) | Max Queue (PCU) | Max LOS | Average Demand (PCU/hr) | Total Junction Arrivals (PCU) |
|----------------------------|---------------|-----------------|---------|-------------------------|-------------------------------|
| 1 - Milton road            | 34.07         | 7.0             | D       | 642                     | 1283                          |
| 2 - Hambleton Road (south) | 8.13          | 4.1             | A       | 1371                    | 2743                          |
| 3 - Elettra Avenue         | 7.73          | 1.6             | A       | 582                     | 1164                          |
| 4 - Hambleton Road (north) | 9.39          | 3.1             | A       | 957                     | 1913                          |

**Main Results for each time segment**

07:30 - 07:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 608                   | 152                     | 1099                      | 609                 | 604                         | 336                             | 0.0               | 2.5             | 13.352    | B                             |
| 2 - Hambleton Road (south) | 1052                  | 263                     | 311                       | 1052                | 1057                        | 1398                            | 0.0               | 1.3             | 4.519     | A                             |
| 3 - Elettra Avenue         | 457                   | 114                     | 870                       | 457                 | 449                         | 493                             | 0.0               | 0.7             | 4.846     | A                             |
| 4 - Hambleton Road (north) | 882                   | 220                     | 551                       | 884                 | 888                         | 776                             | 0.0               | 1.3             | 5.867     | A                             |

## 07:45 - 08:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 696                   | 174                     | 1097                      | 708                 | 694                         | 448                             | 2.5               | 3.1             | 18.065    | C                             |
| 2 - Hambledon Road (south) | 1308                  | 327                     | 354                       | 1306                | 1300                        | 1451                            | 1.3               | 2.2             | 5.695     | A                             |
| 3 - Elettra Avenue         | 471                   | 118                     | 1047                      | 471                 | 474                         | 613                             | 0.7               | 0.8             | 5.259     | A                             |
| 4 - Hambledon Road (north) | 890                   | 223                     | 653                       | 892                 | 893                         | 866                             | 1.3               | 1.5             | 6.133     | A                             |

## 08:00 - 08:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 739                   | 185                     | 1147                      | 737                 | 727                         | 555                             | 3.1               | 5.5             | 24.605    | C                             |
| 2 - Hambledon Road (south) | 1279                  | 320                     | 410                       | 1277                | 1273                        | 1473                            | 2.2               | 2.0             | 5.734     | A                             |
| 3 - Elettra Avenue         | 517                   | 129                     | 1065                      | 514                 | 512                         | 622                             | 0.8               | 1.0             | 5.606     | A                             |
| 4 - Hambledon Road (north) | 960                   | 240                     | 746                       | 956                 | 951                         | 834                             | 1.5               | 2.1             | 6.941     | A                             |

## 08:15 - 08:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 672                   | 168                     | 1351                      | 655                 | 661                         | 453                             | 5.5               | 7.0             | 30.581    | D                             |
| 2 - Hambledon Road (south) | 1130                  | 282                     | 453                       | 1129                | 1132                        | 1553                            | 2.0               | 1.6             | 5.199     | A                             |
| 3 - Elettra Avenue         | 581                   | 145                     | 1147                      | 580                 | 581                         | 435                             | 1.0               | 1.1             | 6.120     | A                             |
| 4 - Hambledon Road (north) | 1052                  | 263                     | 755                       | 1049                | 1033                        | 972                             | 2.1               | 2.5             | 8.004     | A                             |

## 08:30 - 08:45

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 682                   | 171                     | 1192                      | 704                 | 698                         | 501                             | 7.0               | 4.7             | 34.068    | D                             |
| 2 - Hambledon Road (south) | 1482                  | 370                     | 420                       | 1477                | 1472                        | 1476                            | 1.6               | 3.1             | 6.716     | A                             |
| 3 - Elettra Avenue         | 563                   | 141                     | 1222                      | 562                 | 562                         | 675                             | 1.1               | 1.0             | 6.386     | A                             |
| 4 - Hambledon Road (north) | 913                   | 228                     | 777                       | 915                 | 934                         | 1006                            | 2.5               | 1.9             | 7.210     | A                             |

## 08:45 - 09:00

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 638                   | 160                     | 1384                      | 627                 | 626                         | 560                             | 4.7               | 6.0             | 27.842    | D                             |
| 2 - Hambledon Road (south) | 1656                  | 414                     | 359                       | 1654                | 1653                        | 1653                            | 3.1               | 4.1             | 8.131     | A                             |
| 3 - Elettra Avenue         | 586                   | 147                     | 1260                      | 585                 | 590                         | 753                             | 1.0               | 1.3             | 6.932     | A                             |
| 4 - Hambledon Road (north) | 1110                  | 277                     | 834                       | 1110                | 1109                        | 1011                            | 1.9               | 3.1             | 9.388     | A                             |

## 09:00 - 09:15

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 558                   | 140                     | 1360                      | 555                 | 563                         | 553                             | 6.0               | 3.2             | 20.408    | C                             |
| 2 - Hambledon Road (south) | 1609                  | 402                     | 310                       | 1615                | 1625                        | 1605                            | 4.1               | 3.5             | 7.792     | A                             |
| 3 - Elettra Avenue         | 668                   | 167                     | 1339                      | 665                 | 674                         | 586                             | 1.3               | 1.3             | 7.735     | A                             |
| 4 - Hambledon Road (north) | 1002                  | 250                     | 913                       | 1000                | 999                         | 1091                            | 3.1               | 2.4             | 8.587     | A                             |

## 09:15 - 09:30

| Arm                        | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Circulating flow (PCU/hr) | Throughput (PCU/hr) | Average throughput (PCU/hr) | Throughput (exit side) (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-----------------------|-------------------------|---------------------------|---------------------|-----------------------------|---------------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | 537                   | 134                     | 1294                      | 532                 | 534                         | 569                             | 3.2               | 2.4             | 15.946    | C                             |
| 2 - Hambledon Road (south) | 1457                  | 364                     | 331                       | 1464                | 1467                        | 1495                            | 3.5               | 2.3             | 6.359     | A                             |
| 3 - Elettra Avenue         | 813                   | 203                     | 1096                      | 810                 | 798                         | 698                             | 1.3               | 1.6             | 7.692     | A                             |
| 4 - Hambledon Road (north) | 845                   | 211                     | 1019                      | 844                 | 849                         | 887                             | 2.4               | 2.2             | 8.126     | A                             |

## Lane Results

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

### Lanes: Main Results for each time segment

#### 07:30 - 07:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 264                   | 518               | 0.510 | 263                 | 258                         | 0.0               | 0.9             | 10.713    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 348                   | 518               | 0.671 | 346                 | 347                         | 0.0               | 1.4             | 12.516    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 608                   |                   |       | 612                 | 613                         | 0.0               | 0.2             | 1.592     | A                             |
|                            | Exit  | 1          | 1    |                  | 336                   |                   |       | 336                 | 334                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 541                   | 1166              | 0.464 | 541                 | 546                         | 0.0               | 0.7             | 4.696     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 510                   | 1166              | 0.438 | 511                 | 511                         | 0.0               | 0.6             | 4.331     | A                             |
|                            | Exit  | 1          | 1    |                  | 1398                  |                   |       | 1398                | 1398                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 233                   | 981               | 0.238 | 231                 | 224                         | 0.0               | 0.4             | 4.811     | A                             |
|                            |       |            | 2    | 2, 3             | 224                   | 981               | 0.228 | 226                 | 224                         | 0.0               | 0.3             | 4.881     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 457                   |                   |       | 457                 | 451                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 493                   |                   |       | 493                 | 485                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 417                   | 903               | 0.462 | 418                 | 419                         | 0.0               | 0.6             | 5.644     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 465                   | 903               | 0.515 | 466                 | 469                         | 0.0               | 0.8             | 6.066     | A                             |
|                            | Exit  | 1          | 1    |                  | 776                   |                   |       | 776                 | 781                         | 0.0               | 0.0             | 0.000     | A                             |

#### 07:45 - 08:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 307                   | 519               | 0.591 | 308                 | 299                         | 0.9               | 1.0             | 11.921    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 396                   | 519               | 0.763 | 399                 | 394                         | 1.4               | 1.4             | 14.516    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 696                   |                   |       | 702                 | 694                         | 0.2               | 0.7             | 4.664     | A                             |
|                            | Exit  | 1          | 1    |                  | 448                   |                   |       | 448                 | 438                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 654                   | 1150              | 0.569 | 650                 | 645                         | 0.7               | 1.3             | 5.725     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 654                   | 1150              | 0.569 | 656                 | 655                         | 0.6               | 0.9             | 5.666     | A                             |
|                            | Exit  | 1          | 1    |                  | 1451                  |                   |       | 1451                | 1437                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 269                   | 913               | 0.295 | 268                 | 270                         | 0.4               | 0.5             | 5.448     | A                             |
|                            |       |            | 2    | 2, 3             | 202                   | 913               | 0.221 | 203                 | 204                         | 0.3               | 0.3             | 5.009     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 471                   |                   |       | 471                 | 475                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 613                   |                   |       | 613                 | 611                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 429                   | 869               | 0.493 | 431                 | 425                         | 0.6               | 0.6             | 5.857     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 462                   | 869               | 0.531 | 461                 | 468                         | 0.8               | 0.9             | 6.383     | A                             |
|                            | Exit  | 1          | 1    |                  | 866                   |                   |       | 866                 | 875                         | 0.0               | 0.0             | 0.000     | A                             |

#### 08:00 - 08:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 317                   | 504               | 0.630 | 317                 | 314                         | 1.0               | 1.2             | 12.758    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 420                   | 504               | 0.833 | 420                 | 413                         | 1.4               | 1.9             | 16.092    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 739                   |                   |       | 737                 | 730                         | 0.7               | 2.4             | 9.917     | A                             |
|                            | Exit  | 1          | 1    |                  | 555                   |                   |       | 555                 | 551                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 647                   | 1128              | 0.573 | 647                 | 643                         | 1.3               | 1.0             | 5.820     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 632                   | 1128              | 0.560 | 630                 | 630                         | 0.9               | 1.0             | 5.646     | A                             |
|                            | Exit  | 1          | 1    |                  | 1473                  |                   |       | 1473                | 1467                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 290                   | 906               | 0.320 | 288                 | 289                         | 0.5               | 0.6             | 5.735     | A                             |
|                            |       |            | 2    | 2, 3             | 226                   | 906               | 0.250 | 226                 | 223                         | 0.3               | 0.4             | 5.439     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 517                   |                   |       | 517                 | 512                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 622                   |                   |       | 622                 | 612                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 464                   | 838               | 0.553 | 459                 | 456                         | 0.6               | 1.1             | 6.612     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 496                   | 838               | 0.592 | 497                 | 495                         | 0.9               | 1.0             | 7.244     | A                             |
|                            | Exit  | 1          | 1    |                  | 834                   |                   |       | 834                 | 833                         | 0.0               | 0.0             | 0.000     | A                             |

#### 08:15 - 08:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 283                   | 442               | 0.640 | 280                 | 278                         | 1.2               | 1.3             | 14.585    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 376                   | 442               | 0.850 | 375                 | 383                         | 1.9               | 2.1             | 18.295    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 672                   |                   |       | 659                 | 662                         | 2.4               | 3.6             | 13.770    | B                             |
|                            | Exit  | 1          | 1    |                  | 453                   |                   |       | 453                 | 449                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 521                   | 1112              | 0.469 | 522                 | 520                         | 1.0               | 0.6             | 4.853     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 609                   | 1112              | 0.548 | 607                 | 612                         | 1.0               | 1.0             | 5.492     | A                             |
|                            | Exit  | 1          | 1    |                  | 1553                  |                   |       | 1553                | 1547                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 262                   | 875               | 0.299 | 261                 | 266                         | 0.6               | 0.5             | 5.845     | A                             |
|                            |       |            | 2    | 2, 3             | 319                   | 875               | 0.365 | 319                 | 315                         | 0.4               | 0.6             | 6.351     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 581                   |                   |       | 581                 | 582                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 435                   |                   |       | 435                 | 423                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 494                   | 835               | 0.591 | 492                 | 489                         | 1.1               | 1.1             | 7.632     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 558                   | 835               | 0.669 | 558                 | 544                         | 1.0               | 1.3             | 8.337     | A                             |
|                            | Exit  | 1          | 1    |                  | 972                   |                   |       | 972                 | 988                         | 0.0               | 0.0             | 0.000     | A                             |

08:30 - 08:45

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 310                   | 490               | 0.633 | 308                 | 308                         | 1.3               | 1.2             | 14.578    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 394                   | 490               | 0.804 | 396                 | 390                         | 2.1               | 1.7             | 18.538    | C                             |
|                            | Exit  | 1          | 1    | (1, 2, 3, 4)     | 682                   |                   |       | 704                 | 697                         | 3.6               | 1.7             | 17.340    | C                             |
|                            |       |            | 1    |                  | 501                   |                   |       | 501                 | 492                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 749                   | 1124              | 0.666 | 744                 | 737                         | 0.6               | 1.6             | 6.673     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 733                   | 1124              | 0.652 | 733                 | 736                         | 1.0               | 1.5             | 6.759     | A                             |
|                            | Exit  | 1          | 1    |                  | 1476                  |                   |       | 1476                | 1492                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 294                   | 846               | 0.348 | 294                 | 292                         | 0.5               | 0.6             | 6.564     | A                             |
|                            |       |            | 2    | 2, 3             | 269                   | 846               | 0.317 | 269                 | 270                         | 0.6               | 0.5             | 6.193     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 563                   |                   |       | 563                 | 561                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 675                   |                   |       | 675                 | 663                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 430                   | 827               | 0.520 | 430                 | 438                         | 1.1               | 0.9             | 6.765     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 482                   | 827               | 0.583 | 485                 | 496                         | 1.3               | 1.0             | 7.602     | A                             |
|                            | Exit  | 1          | 1    |                  | 1006                  |                   |       | 1006                | 1020                        | 0.0               | 0.0             | 0.000     | A                             |

08:45 - 09:00

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 279                   | 432               | 0.645 | 280                 | 275                         | 1.2               | 1.3             | 15.597    | C                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 348                   | 432               | 0.805 | 348                 | 351                         | 1.7               | 2.0             | 18.496    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 638                   |                   |       | 626                 | 628                         | 1.7               | 2.7             | 10.575    | B                             |
|                            | Exit  | 1          | 1    |                  | 560                   |                   |       | 560                 | 560                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 856                   | 1148              | 0.746 | 856                 | 848                         | 1.6               | 2.2             | 8.213     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 801                   | 1148              | 0.698 | 798                 | 805                         | 1.5               | 1.9             | 8.044     | A                             |
|                            | Exit  | 1          | 1    |                  | 1653                  |                   |       | 1653                | 1648                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 306                   | 832               | 0.368 | 306                 | 306                         | 0.6               | 0.7             | 7.241     | A                             |
|                            |       |            | 2    | 2, 3             | 280                   | 832               | 0.337 | 279                 | 284                         | 0.5               | 0.5             | 6.599     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 586                   |                   |       | 586                 | 591                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 753                   |                   |       | 753                 | 762                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 529                   | 809               | 0.655 | 530                 | 529                         | 0.9               | 1.4             | 9.204     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 580                   | 809               | 0.718 | 580                 | 580                         | 1.0               | 1.6             | 9.555     | A                             |
|                            | Exit  | 1          | 1    |                  | 1011                  |                   |       | 1011                | 1008                        | 0.0               | 0.0             | 0.000     | A                             |

09:00 - 09:15

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 240                   | 439               | 0.545 | 238                 | 243                         | 1.3               | 0.9             | 13.585    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 319                   | 439               | 0.725 | 317                 | 320                         | 2.0               | 1.6             | 16.795    | C                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 558                   |                   |       | 558                 | 560                         | 2.7               | 0.7             | 5.094     | A                             |
|                            | Exit  | 1          | 1    |                  | 553                   |                   |       | 553                 | 559                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 810                   | 1166              | 0.694 | 812                 | 822                         | 2.2               | 1.8             | 7.994     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 799                   | 1166              | 0.685 | 803                 | 803                         | 1.9               | 1.7             | 7.587     | A                             |
|                            | Exit  | 1          | 1    |                  | 1605                  |                   |       | 1605                | 1607                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 310                   | 802               | 0.386 | 309                 | 314                         | 0.7               | 0.6             | 7.338     | A                             |
|                            |       |            | 2    | 2, 3             | 358                   | 802               | 0.447 | 357                 | 360                         | 0.5               | 0.8             | 8.064     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 668                   |                   |       | 668                 | 674                         | 0.0               | 0.0             | 0.008     | A                             |
|                            | Exit  | 1          | 1    |                  | 586                   |                   |       | 586                 | 595                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 488                   | 782               | 0.624 | 486                 | 488                         | 1.4               | 1.2             | 8.323     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 513                   | 782               | 0.656 | 514                 | 511                         | 1.6               | 1.2             | 8.839     | A                             |
|                            | Exit  | 1          | 1    |                  | 1091                  |                   |       | 1091                | 1101                        | 0.0               | 0.0             | 0.000     | A                             |

09:15 - 09:30

| Arm                        | Side  | Lane level | Lane | Destination arms | Total Demand (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|------------------|-----------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 2                | 225                   | 459               | 0.489 | 223                 | 225                         | 0.9               | 0.8             | 11.733    | B                             |
|                            |       |            | 2    | 1, 2, 3, 4       | 310                   | 459               | 0.675 | 309                 | 308                         | 1.6               | 1.3             | 14.585    | B                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 537                   |                   |       | 535                 | 532                         | 0.7               | 0.3             | 2.598     | A                             |
|                            | Exit  | 1          | 1    |                  | 569                   |                   |       | 569                 | 576                         | 0.0               | 0.0             | 0.000     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 3, 4             | 721                   | 1158              | 0.623 | 723                 | 728                         | 1.8               | 1.1             | 6.414     | A                             |
|                            |       |            | 2    | 1, 2, 4          | 736                   | 1158              | 0.635 | 741                 | 739                         | 1.7               | 1.1             | 6.304     | A                             |
|                            | Exit  | 1          | 1    |                  | 1495                  |                   |       | 1495                | 1482                        | 0.0               | 0.0             | 0.000     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1, 4             | 373                   | 894               | 0.417 | 370                 | 371                         | 0.6               | 0.8             | 6.999     | A                             |
|                            |       |            | 2    | 2, 3             | 440                   | 894               | 0.492 | 440                 | 426                         | 0.8               | 0.9             | 8.297     | A                             |
|                            |       | 2          | 1    | (1, 2, 3, 4)     | 813                   |                   |       | 813                 | 799                         | 0.0               | 0.0             | 0.000     | A                             |
|                            | Exit  | 1          | 1    |                  | 698                   |                   |       | 698                 | 706                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1, 2             | 396                   | 747               | 0.530 | 395                 | 398                         | 1.2               | 1.0             | 7.863     | A                             |
|                            |       |            | 2    | 2, 3, 4          | 449                   | 747               | 0.602 | 449                 | 450                         | 1.2               | 1.2             | 8.358     | A                             |
|                            | Exit  | 1          | 1    |                  | 887                   |                   |       | 887                 | 885                         | 0.0               | 0.0             | 0.000     | A                             |

## Lane movements: Main Results for each time segment

07:30 - 07:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 264                   | 66                      | 850                          | 518               | 0.509 | 263                 | 258                         | 0.0               | 0.9             | 10.713    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 160                   | 40                      | 850                          | 517               | 0.310 | 160                 | 166                         | 0.0               | 0.5             | 10.794    | B                             |
|                            |       |            |      | 3      | 107                   | 27                      | 850                          | 517               | 0.207 | 104                 | 101                         | 0.0               | 0.7             | 14.085    | B                             |
|                            |       |            |      | 4      | 80                    | 20                      | 850                          | 517               | 0.155 | 82                  | 80                          | 0.0               | 0.3             | 14.070    | B                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 421                   | 105                     | -                            | -                 | -     | 424                 | 429                         | 0.0               | 0.1             | 1.330     | A                             |
|                            |       |            |      | 3      | 107                   | 27                      | -                            | -                 | -     | 107                 | 103                         | 0.0               | 0.0             | 2.231     | A                             |
|                            |       |            |      | 4      | 80                    | 20                      | -                            | -                 | -     | 80                  | 81                          | 0.0               | 0.1             | 2.153     | A                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 291                   | 73                      | 1286                         | 1166              | 0.250 | 291                 | 288                         | 0.0               | 0.4             | 5.337     | A                             |
|                            |       |            |      | 4      | 250                   | 63                      | 1286                         | 1166              | 0.214 | 250                 | 258                         | 0.0               | 0.3             | 3.980     | A                             |
|                            |       |            | 2    | 1      | 221                   | 55                      | 1286                         | 1167              | 0.190 | 223                 | 223                         | 0.0               | 0.2             | 4.889     | A                             |
|                            |       |            |      | 2      | 9                     | 2                       | 1136                         | 1032              | 0.009 | 9                   | 9                           | 0.0               | 0.0             | 4.912     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 280                   | 70                      | 1286                         | 1166              | 0.240 | 279                 | 280                         | 0.0               | 0.4             | 3.869     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 94                    | 24                      | 1314                         | 979               | 0.096 | 93                  | 90                          | 0.0               | 0.2             | 4.791     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 139                   | 35                      | 1314                         | 981               | 0.142 | 138                 | 134                         | 0.0               | 0.3             | 4.824     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 224                   | 56                      | 1314                         | 979               | 0.228 | 226                 | 224                         | 0.0               | 0.3             | 4.881     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 94                    | 24                      | -                            | -                 | -     | 94                  | 91                          | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 224                   | 56                      | -                            | -                 | -     | 224                 | 225                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 139                   | 35                      | -                            | -                 | -     | 139                 | 135                         | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 19                    | 5                       | 1076                         | 896               | 0.021 | 19                  | 21                          | 0.0               | 0.0             | 6.667     | A                             |
|                            |       |            |      | 2      | 398                   | 99                      | 1086                         | 903               | 0.441 | 399                 | 398                         | 0.0               | 0.6             | 5.590     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 340                   | 85                      | 1086                         | 903               | 0.377 | 341                 | 344                         | 0.0               | 0.5             | 5.687     | A                             |
|                            |       |            |      | 3      | 98                    | 24                      | 1086                         | 903               | 0.108 | 97                  | 96                          | 0.0               | 0.2             | 7.123     | A                             |
|                            |       |            |      | 4      | 27                    | 7                       | 1086                         | 902               | 0.030 | 28                  | 29                          | 0.0               | 0.0             | 7.037     | A                             |

07:45 - 08:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 307                   | 77                      | 850                          | 519               | 0.591 | 308                 | 299                         | 0.9               | 1.0             | 11.921    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 178                   | 45                      | 850                          | 517               | 0.345 | 178                 | 172                         | 0.5               | 0.6             | 12.843    | B                             |
|                            |       |            |      | 3      | 173                   | 43                      | 850                          | 519               | 0.332 | 175                 | 175                         | 0.7               | 0.6             | 15.687    | C                             |
|                            |       |            |      | 4      | 45                    | 11                      | 850                          | 516               | 0.087 | 46                  | 47                          | 0.3               | 0.2             | 16.310    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 480                   | 120                     | -                            | -                 | -     | 485                 | 473                         | 0.1               | 0.4             | 4.171     | A                             |
|                            |       |            |      | 3      | 171                   | 43                      | -                            | -                 | -     | 173                 | 175                         | 0.0               | 0.2             | 5.600     | A                             |
|                            |       |            |      | 4      | 45                    | 11                      | -                            | -                 | -     | 45                  | 47                          | 0.1               | 0.1             | 6.149     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 331                   | 83                      | 1286                         | 1149              | 0.288 | 330                 | 326                         | 0.4               | 0.6             | 6.472     | A                             |
|                            |       |            |      | 4      | 323                   | 81                      | 1286                         | 1148              | 0.281 | 320                 | 319                         | 0.3               | 0.7             | 4.964     | A                             |
|                            |       |            | 2    | 1      | 327                   | 82                      | 1286                         | 1149              | 0.285 | 329                 | 320                         | 0.2               | 0.5             | 6.318     | A                             |
|                            |       |            |      | 2      | 29                    | 7                       | 1286                         | 1146              | 0.025 | 29                  | 30                          | 0.0               | 0.0             | 6.073     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 297                   | 74                      | 1286                         | 1149              | 0.258 | 298                 | 305                         | 0.4               | 0.4             | 4.938     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 92                    | 23                      | 1314                         | 912               | 0.101 | 91                  | 92                          | 0.2               | 0.2             | 5.394     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 177                   | 44                      | 1314                         | 913               | 0.194 | 177                 | 178                         | 0.3               | 0.3             | 5.476     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 202                   | 51                      | 1314                         | 914               | 0.221 | 203                 | 204                         | 0.3               | 0.3             | 5.009     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 92                    | 23                      | -                            | -                 | -     | 92                  | 92                          | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 202                   | 51                      | -                            | -                 | -     | 202                 | 204                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 177                   | 44                      | -                            | -                 | -     | 177                 | 179                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 27                    | 7                       | 1086                         | 871               | 0.031 | 27                  | 26                          | 0.0               | 0.0             | 7.088     | A                             |
|                            |       |            |      | 2      | 401                   | 100                     | 1086                         | 869               | 0.462 | 404                 | 399                         | 0.6               | 0.6             | 5.776     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

08:00 - 08:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 317                   | 79                      | 850                          | 504               | 0.630 | 317                 | 314                         | 1.0               | 1.2             | 12.758    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 159                   | 40                      | 850                          | 503               | 0.315 | 159                 | 159                         | 0.6               | 0.6             | 14.000    | B                             |
|                            |       |            |      | 3      | 153                   | 38                      | 850                          | 504               | 0.304 | 154                 | 146                         | 0.6               | 0.7             | 17.369    | C                             |
|                            |       |            |      | 4      | 108                   | 27                      | 850                          | 502               | 0.215 | 107                 | 107                         | 0.2               | 0.6             | 17.431    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 476                   | 119                     | -                            | -                 | -     | 476                 | 474                         | 0.4               | 1.3             | 9.049     | A                             |
|                            |       |            |      | 3      | 156                   | 39                      | -                            | -                 | -     | 153                 | 147                         | 0.2               | 0.7             | 11.767    | B                             |
|                            |       |            |      | 4      | 108                   | 27                      | -                            | -                 | -     | 108                 | 109                         | 0.1               | 0.4             | 11.190    | B                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 371                   | 93                      | 1286                         | 1128              | 0.329 | 372                 | 370                         | 0.6               | 0.5             | 6.513     | A                             |
|                            |       |            |      | 4      | 276                   | 69                      | 1286                         | 1128              | 0.244 | 274                 | 273                         | 0.7               | 0.5             | 4.878     | A                             |
|                            |       |            | 2    | 1      | 336                   | 84                      | 1286                         | 1129              | 0.298 | 333                 | 332                         | 0.5               | 0.7             | 6.314     | A                             |
|                            |       |            |      | 2      | 5                     | 1                       | 736                          | 647               | 0.007 | 5                   | 4                           | 0.0               | 0.0             | 6.890     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 291                   | 73                      | 1286                         | 1128              | 0.258 | 292                 | 293                         | 0.4               | 0.4             | 4.871     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 183                   | 46                      | 1314                         | 905               | 0.202 | 181                 | 182                         | 0.2               | 0.4             | 5.757     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 108                   | 27                      | 1314                         | 905               | 0.119 | 107                 | 107                         | 0.3               | 0.2             | 5.698     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 226                   | 57                      | 1314                         | 907               | 0.250 | 226                 | 223                         | 0.3               | 0.4             | 5.439     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 183                   | 46                      | -                            | -                 | -     | 183                 | 183                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 226                   | 57                      | -                            | -                 | -     | 226                 | 223                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 108                   | 27                      | -                            | -                 | -     | 108                 | 107                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 41                    | 10                      | 1086                         | 839               | 0.049 | 40                  | 37                          | 0.0               | 0.1             | 7.263     | A                             |
|                            |       |            |      | 2      | 422                   | 106                     | 1086                         | 838               | 0.504 | 419                 | 419                         | 0.6               | 0.9             | 6.555     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

08:15 - 08:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 283                   | 71                      | 850                          | 442               | 0.640 | 280                 | 278                         | 1.2               | 1.3             | 14.585    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 123                   | 31                      | 850                          | 443               | 0.278 | 122                 | 133                         | 0.6               | 0.7             | 16.252    | C                             |
|                            |       |            |      | 3      | 132                   | 33                      | 850                          | 444               | 0.298 | 132                 | 127                         | 0.7               | 0.7             | 19.572    | C                             |
|                            |       |            |      | 4      | 120                   | 30                      | 850                          | 444               | 0.271 | 121                 | 122                         | 0.6               | 0.7             | 19.197    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 416                   | 104                     | -                            | -                 | -     | 406                 | 412                         | 1.3               | 2.2             | 13.089    | B                             |
|                            |       |            |      | 3      | 134                   | 34                      | -                            | -                 | -     | 132                 | 127                         | 0.7               | 0.7             | 15.131    | C                             |
|                            |       |            |      | 4      | 122                   | 31                      | -                            | -                 | -     | 120                 | 123                         | 0.4               | 0.7             | 14.659    | B                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 169                   | 42                      | 1286                         | 1112              | 0.152 | 169                 | 163                         | 0.5               | 0.2             | 5.479     | A                             |
|                            |       |            |      | 4      | 352                   | 88                      | 1286                         | 1112              | 0.317 | 353                 | 357                         | 0.5               | 0.5             | 4.569     | A                             |
|                            |       |            | 2    | 1      | 298                   | 74                      | 1286                         | 1112              | 0.268 | 298                 | 297                         | 0.7               | 0.6             | 6.239     | A                             |
|                            |       |            |      | 2      | 39                    | 10                      | 1286                         | 1114              | 0.035 | 37                  | 37                          | 0.0               | 0.1             | 6.450     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 272                   | 68                      | 1286                         | 1111              | 0.245 | 271                 | 278                         | 0.4               | 0.3             | 4.566     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 100                   | 25                      | 1314                         | 872               | 0.115 | 100                 | 101                         | 0.4               | 0.2             | 5.754     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 161                   | 40                      | 1314                         | 874               | 0.185 | 161                 | 165                         | 0.2               | 0.3             | 5.901     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 319                   | 80                      | 1314                         | 874               | 0.365 | 319                 | 315                         | 0.4               | 0.6             | 6.351     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 100                   | 25                      | -                            | -                 | -     | 100                 | 100                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 319                   | 80                      | -                            | -                 | -     | 319                 | 316                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 161                   | 40                      | -                            | -                 | -     | 161                 | 165                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 55                    | 14                      | 1086                         | 835               | 0.066 | 54                  | 51                          | 0.1               | 0.2             | 8.909     | A                             |
|                            |       |            |      | 2      | 439                   | 110                     | 1086                         | 834               | 0.526 | 437                 | 438                         | 0.9               | 1.0             | 7.483     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 357                   | 89                      | 1086                         | 835               | 0.428 | 358                 | 345                         | 0.7               | 0.7             | 7.459     | A                             |
|                            |       |            |      | 3      | 135                   | 34                      | 1086                         | 832               | 0.162 | 133                 | 133                         | 0.1               | 0.5             | 9.777     | A                             |
|                            |       |            |      | 4      | 66                    | 17                      | 1086                         | 832               | 0.079 | 67                  | 66                          | 0.2               | 0.2             | 9.994     | A                             |

08:30 - 08:45

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 310                   | 78                      | 850                          | 490               | 0.633 | 308                 | 308                         | 1.3               | 1.2             | 14.578    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 167                   | 42                      | 850                          | 490               | 0.340 | 168                 | 165                         | 0.7               | 0.7             | 16.810    | C                             |
|                            |       |            |      | 3      | 153                   | 38                      | 850                          | 491               | 0.313 | 154                 | 148                         | 0.7               | 0.7             | 19.797    | C                             |
|                            |       |            |      | 4      | 74                    | 18                      | 850                          | 488               | 0.151 | 74                  | 77                          | 0.7               | 0.3             | 19.836    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 465                   | 116                     | -                            | -                 | -     | 477                 | 473                         | 2.2               | 1.1             | 16.579    | C                             |
|                            |       |            |      | 3      | 147                   | 37                      | -                            | -                 | -     | 153                 | 148                         | 0.7               | 0.4             | 18.989    | C                             |
|                            |       |            |      | 4      | 70                    | 18                      | -                            | -                 | -     | 74                  | 76                          | 0.7               | 0.2             | 18.892    | C                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 381                   | 95                      | 1286                         | 1125              | 0.338 | 377                 | 373                         | 0.2               | 0.9             | 7.525     | A                             |
|                            |       |            |      | 4      | 369                   | 92                      | 1286                         | 1125              | 0.328 | 367                 | 364                         | 0.5               | 0.7             | 5.795     | A                             |
|                            |       |            | 2    | 1      | 328                   | 82                      | 1286                         | 1124              | 0.291 | 331                 | 322                         | 0.6               | 0.6             | 7.691     | A                             |
|                            |       |            |      | 2      | 50                    | 13                      | 1286                         | 1125              | 0.045 | 49                  | 50                          | 0.1               | 0.2             | 7.361     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 355                   | 89                      | 1286                         | 1124              | 0.316 | 353                 | 364                         | 0.3               | 0.7             | 5.856     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 130                   | 32                      | 1314                         | 841               | 0.154 | 129                 | 128                         | 0.2               | 0.2             | 6.385     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 165                   | 41                      | 1314                         | 845               | 0.195 | 165                 | 164                         | 0.3               | 0.3             | 6.703     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 269                   | 67                      | 1314                         | 847               | 0.317 | 269                 | 270                         | 0.6               | 0.5             | 6.193     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 130                   | 32                      | -                            | -                 | -     | 130                 | 128                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 269                   | 67                      | -                            | -                 | -     | 269                 | 269                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 165                   | 41                      | -                            | -                 | -     | 165                 | 164                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 42                    | 10                      | 1086                         | 828               | 0.050 | 41                  | 42                          | 0.2               | 0.1             | 7.830     | A                             |
|                            |       |            |      | 2      | 389                   | 97                      | 1086                         | 827               | 0.470 | 389                 | 396                         | 1.0               | 0.8             | 6.652     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 293                   | 73                      | 1086                         | 827               | 0.355 | 293                 | 303                         | 0.7               | 0.6             | 6.808     | A                             |
|                            |       |            |      | 3      | 142                   | 36                      | 1086                         | 827               | 0.172 | 144                 | 143                         | 0.5               | 0.3             | 8.797     | A                             |
|                            |       |            |      | 4      | 47                    | 12                      | 1086                         | 829               | 0.056 | 48                  | 50                          | 0.2               | 0.1             | 9.024     | A                             |

08:45 - 09:00

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 279                   | 70                      | 850                          | 431               | 0.646 | 280                 | 275                         | 1.2               | 1.3             | 15.597    | C                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 158                   | 39                      | 850                          | 431               | 0.367 | 160                 | 158                         | 0.7               | 0.7             | 16.648    | C                             |
|                            |       |            |      | 3      | 109                   | 27                      | 850                          | 432               | 0.253 | 109                 | 114                         | 0.7               | 0.7             | 19.980    | C                             |
|                            |       |            |      | 4      | 81                    | 20                      | 850                          | 429               | 0.188 | 79                  | 80                          | 0.3               | 0.6             | 20.033    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 444                   | 111                     | -                            | -                 | -     | 437                 | 434                         | 1.1               | 1.7             | 9.804     | A                             |
|                            |       |            |      | 3      | 112                   | 28                      | -                            | -                 | -     | 109                 | 114                         | 0.4               | 0.6             | 12.052    | B                             |
|                            |       |            |      | 4      | 83                    | 21                      | -                            | -                 | -     | 81                  | 81                          | 0.2               | 0.4             | 12.628    | B                             |
| 2 - Hambleton Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 512                   | 128                     | 1286                         | 1148              | 0.446 | 512                 | 512                         | 0.9               | 1.6             | 9.126     | A                             |
|                            |       |            |      | 4      | 344                   | 86                      | 1286                         | 1147              | 0.300 | 344                 | 336                         | 0.7               | 0.6             | 6.811     | A                             |
|                            |       |            | 2    | 1      | 392                   | 98                      | 1286                         | 1148              | 0.342 | 391                 | 389                         | 0.6               | 1.1             | 9.033     | A                             |
|                            |       |            |      | 2      | 38                    | 10                      | 1286                         | 1146              | 0.033 | 39                  | 41                          | 0.2               | 0.1             | 8.952     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 370                   | 93                      | 1286                         | 1147              | 0.323 | 368                 | 374                         | 0.7               | 0.8             | 6.911     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 124                   | 31                      | 1314                         | 832               | 0.149 | 125                 | 126                         | 0.2               | 0.3             | 7.189     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 182                   | 46                      | 1314                         | 833               | 0.219 | 181                 | 180                         | 0.3               | 0.4             | 7.277     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 280                   | 70                      | 1314                         | 831               | 0.337 | 279                 | 284                         | 0.5               | 0.5             | 6.599     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambleton Road (north) | Entry | 1          | 1    | 1      | 124                   | 31                      | -                            | -                 | -     | 124                 | 126                         | 0.0               | 0.0             | 0.001     | A                             |
|                            |       |            |      | 2      | 280                   | 70                      | -                            | -                 | -     | 280                 | 284                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 182                   | 46                      | -                            | -                 | -     | 182                 | 180                         | 0.0               | 0.0             | 0.001     | A                             |
|                            |       |            | 2    | 1      | 44                    | 11                      | 1086                         | 806               | 0.055 | 45                  | 45                          | 0.1               | 0.1             | 10.241    | B                             |
|                            |       |            |      | 2      | 485                   | 121                     | 1086                         | 809               | 0.600 | 486                 | 485                         | 0.8               | 1.3             | 9.109     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |

09:00 - 09:15

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 240                   | 60                      | 850                          | 439               | 0.545 | 238                 | 243                         | 1.3               | 0.9             | 13.585    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 135                   | 34                      | 850                          | 437               | 0.310 | 134                 | 134                         | 0.7               | 0.6             | 14.605    | B                             |
|                            |       |            |      | 3      | 96                    | 24                      | 850                          | 439               | 0.218 | 96                  | 99                          | 0.7               | 0.6             | 18.392    | C                             |
|                            |       |            |      | 4      | 87                    | 22                      | 850                          | 439               | 0.199 | 87                  | 87                          | 0.6               | 0.4             | 18.336    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 374                   | 93                      | -                            | -                 | -     | 375                 | 375                         | 1.7               | 0.3             | 4.687     | A                             |
|                            |       |            |      | 3      | 96                    | 24                      | -                            | -                 | -     | 96                  | 99                          | 0.6               | 0.2             | 6.008     | A                             |
|                            |       |            |      | 4      | 89                    | 22                      | -                            | -                 | -     | 87                  | 87                          | 0.4               | 0.2             | 5.810     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 445                   | 111                     | 1286                         | 1166              | 0.382 | 449                 | 453                         | 1.6               | 1.1             | 8.915     | A                             |
|                            |       |            |      | 4      | 365                   | 91                      | 1286                         | 1167              | 0.313 | 363                 | 369                         | 0.6               | 0.7             | 6.868     | A                             |
|                            |       |            | 2    | 1      | 347                   | 87                      | 1286                         | 1165              | 0.298 | 349                 | 357                         | 1.1               | 0.9             | 8.422     | A                             |
|                            |       |            |      | 2      | 48                    | 12                      | 1286                         | 1166              | 0.041 | 49                  | 46                          | 0.1               | 0.1             | 8.128     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 404                   | 101                     | 1286                         | 1165              | 0.346 | 405                 | 400                         | 0.8               | 0.7             | 6.782     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 160                   | 40                      | 1314                         | 801               | 0.200 | 158                 | 157                         | 0.3               | 0.3             | 7.464     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 150                   | 37                      | 1314                         | 802               | 0.187 | 150                 | 157                         | 0.4               | 0.3             | 7.211     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 358                   | 89                      | 1314                         | 801               | 0.447 | 357                 | 360                         | 0.5               | 0.8             | 8.064     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       | 2          | 1    | 1      | 160                   | 40                      | -                            | -                 | -     | 160                 | 157                         | 0.0               | 0.0             | 0.012     | A                             |
|                            |       |            |      | 2      | 358                   | 89                      | -                            | -                 | -     | 358                 | 361                         | 0.0               | 0.0             | 0.008     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 150                   | 37                      | -                            | -                 | -     | 150                 | 156                         | 0.0               | 0.0             | 0.003     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 46                    | 11                      | 1086                         | 777               | 0.059 | 46                  | 45                          | 0.1               | 0.2             | 9.319     | A                             |
|                            |       |            |      | 2      | 442                   | 111                     | 1086                         | 782               | 0.566 | 441                 | 443                         | 1.3               | 1.1             | 8.221     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 387                   | 97                      | 1086                         | 782               | 0.495 | 387                 | 381                         | 1.1               | 0.9             | 8.316     | A                             |
|                            |       |            |      | 3      | 41                    | 10                      | 1086                         | 780               | 0.052 | 42                  | 42                          | 0.4               | 0.1             | 10.295    | B                             |
|                            |       |            |      | 4      | 85                    | 21                      | 1086                         | 781               | 0.109 | 86                  | 88                          | 0.1               | 0.2             | 10.419    | B                             |

09:15 - 09:30

| Arm                        | Side  | Lane level | Lane | To Arm | Total Demand (PCU/hr) | Junction Arrivals (PCU) | Simulation max flow (PCU/hr) | Capacity (PCU/hr) | RFC   | Throughput (PCU/hr) | Average throughput (PCU/hr) | Start queue (PCU) | End queue (PCU) | Delay (s) | Unsignalised level of service |
|----------------------------|-------|------------|------|--------|-----------------------|-------------------------|------------------------------|-------------------|-------|---------------------|-----------------------------|-------------------|-----------------|-----------|-------------------------------|
| 1 - Milton road            | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 225                   | 56                      | 850                          | 460               | 0.488 | 223                 | 225                         | 0.9               | 0.8             | 11.733    | B                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 131                   | 33                      | 850                          | 459               | 0.285 | 132                 | 126                         | 0.6               | 0.4             | 12.447    | B                             |
|                            |       |            |      | 3      | 151                   | 38                      | 850                          | 458               | 0.328 | 148                 | 151                         | 0.6               | 0.8             | 16.032    | C                             |
|                            |       |            |      | 4      | 29                    | 7                       | 850                          | 460               | 0.063 | 29                  | 31                          | 0.4               | 0.1             | 16.302    | C                             |
|                            |       | 2          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 357                   | 89                      | -                            | -                 | -     | 355                 | 351                         | 0.3               | 0.2             | 2.155     | A                             |
|                            |       |            |      | 3      | 151                   | 38                      | -                            | -                 | -     | 151                 | 151                         | 0.2               | 0.1             | 3.436     | A                             |
|                            |       |            |      | 4      | 29                    | 7                       | -                            | -                 | -     | 29                  | 30                          | 0.2               | 0.0             | 3.568     | A                             |
| 2 - Hambledon Road (south) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 393                   | 98                      | 1286                         | 1159              | 0.339 | 396                 | 401                         | 1.1               | 0.6             | 7.186     | A                             |
|                            |       |            |      | 4      | 328                   | 82                      | 1286                         | 1157              | 0.284 | 327                 | 327                         | 0.7               | 0.5             | 5.469     | A                             |
|                            |       |            | 2    | 1      | 363                   | 91                      | 1286                         | 1158              | 0.313 | 366                 | 366                         | 0.9               | 0.5             | 7.100     | A                             |
|                            |       |            |      | 2      | 51                    | 13                      | 1286                         | 1158              | 0.044 | 50                  | 50                          | 0.1               | 0.1             | 7.205     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 322                   | 81                      | 1286                         | 1158              | 0.278 | 324                 | 323                         | 0.7               | 0.5             | 5.263     | A                             |
| 3 - Elettra Avenue         | Entry | 1          | 1    | 1      | 164                   | 41                      | 1314                         | 896               | 0.183 | 163                 | 169                         | 0.3               | 0.3             | 6.879     | A                             |
|                            |       |            |      | 2      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 209                   | 52                      | 1314                         | 896               | 0.233 | 207                 | 202                         | 0.3               | 0.4             | 7.100     | A                             |
|                            |       |            | 2    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 440                   | 110                     | 1314                         | 894               | 0.492 | 440                 | 426                         | 0.8               | 0.9             | 8.297     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 164                   | 41                      | -                            | -                 | -     | 164                 | 169                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 440                   | 110                     | -                            | -                 | -     | 440                 | 427                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 209                   | 52                      | -                            | -                 | -     | 209                 | 203                         | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            | 2    | 1      | 40                    | 10                      | 1086                         | 748               | 0.053 | 40                  | 41                          | 0.2               | 0.0             | 9.187     | A                             |
|                            |       |            |      | 2      | 356                   | 89                      | 1086                         | 747               | 0.477 | 354                 | 358                         | 1.1               | 1.0             | 7.712     | A                             |
|                            |       |            |      | 3      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
| 4 - Hambledon Road (north) | Entry | 1          | 1    | 1      | 0                     | 0                       | 0                            | 0                 | 0.000 | 0                   | 0                           | 0.0               | 0.0             | 0.000     | A                             |
|                            |       |            |      | 2      | 297                   | 74                      | 1086                         | 748               | 0.397 | 295                 | 296                         | 0.9               | 0.8             | 7.582     | A                             |
|                            |       |            |      | 3      | 152                   | 38                      | 1086                         | 749               | 0.203 | 154                 | 154                         | 0.1               | 0.4             | 9.837     | A                             |
|                            |       |            |      | 4      | 0                     | 0                       | 148                          | 104               | 0.000 | 0                   | 0.62                        | 0.2               | 0.0             | 0.000     | A                             |



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